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RED HILL CREEK VALLEY RECREATION PLAN

RED HILL CREEK LAND USE POTENTIAL SEPTEMBER 1982

RED HILL CREEK

LAND USE POTENTIAL

A PLAN OF CULTURAL, SOCIAL AND RECREATIONAL USES IN THE RED HILL CREEK VALLEY

LOUIE VENTRESCA, PROJECT MANAGER
FRANK ARPINO
SHARON AUGUSTINE
ISMAY PASCALL
EDITH HAYASHIDA

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RED HILL CREEK LAND USE POTENTIAL

Purpose and Intent 1.1

The main objective of this report is to investigate the overall feasibility of the Red Hill Creek Valley, in the east end of the City of Hamilton, for accomodating cultural and recreational facilities, as opposed to the proposed epxressway. It is intended to provide a report outlining possible development of the Valley through use of past reports, site analysis, questionnaire results, and interviews.

The final report would be of interest to the general public, social/recreational and political groups, and therefore, should be written in an easily understandable manner.

Study Team 1.2

Five university and polytechnical students of geography, planning, architecture and administration backgrounds formed the study team.

Under the direction of a project manager, the team members undertook to study and plan cultural, social and recreational uses in the Red Hill Creek Valley during the period between May 10 and September 3, 1982. Parkdale Community School, was used to house the project.

Project Funding 1.3

The Save the Valley Committee received approval of its application for a Federal Government grant under the Summer Canada Community Project for this study.

The grant totalling $15,759 was designed to provide jobs, to benefit the community and give students experience with practical techniques in working on the development of a significant natural resource.

Acknowledgements 1.4

We would like to acknowledge the cooperation and assistance of the following people in the preparation of this report:

-Bob Christian, Hamilton Region Conservation Authority.
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Methodology 1.5

Individual members of the study team were responsible for completing various sections of the project. Specific areas of research and follow-up work included:

-Questionnaire sampling and results
-Existing conditions
-History and social planning
-Recommendations and cost estimates
-Design criteria
-Environmental concerns

General research involved the review of pertinent reports and interviews with representatives of interested and related agencies in the Hamilton-Wentworth region.[1]

The study team conducted an exploratory two-day field study through the Red Hill Creek Valley on May 12 and 13. Areas having potential for development of recreational facilities and existing facilities and activities were identified and described at this time. A second walk through the valley, on August 10, allowed team members an opportunity to confirm the suitability of various proposed facilities.

A questionnaire on recreational, social, and cultural development of the valley was distributed randomly among study area residents. Figure 1 illustrates the approximate limits of the study area and neighbourhood boundaries. The population of these neighbourhoods was estimated to be 43,600.[2] A 1% sample of 436 was calculated for questionnaire distribution.

The purpose of the questionnaire was to obtain information from residents living near the Red Hill Creek Valley on potential uses for the valley. This information assisted the study team in identifying what neighbourhoods lacked and what improvements were needed, while giving an overall view on how the valley should be developed.

Study Area 2.1

The Red Hill Creek Valley is a natural wooded area located in the east end of the City of Hamilton. The Valley extends from the QEW at Globe Park, to the top of the Niagara Escarpment at Albion Falls. It is approximately 5½ miles long. It's width is narrow in it's lower reaches near the QEW, widening towards the north and the King's Forest area.

The Valley contains approximately 810 acres of land with much of the area used for passive recreation while several acres are used actively. There is great potential for developing the area for both passive and active recreational activities.

The Red Hill Creek Valley forms a physical barrier running in a north-south direction between the Niagara Escarpment and Lake Ontario. South of Albion Falls it loses it's impact as a physical barrier.

The gorge at Albion Falls has steep slopes, as do several other parts of the valley. In some areas the slopes are gentler. Within the valley there are a number of acres of relatively flat land, suitable to various developments.

Albion Falls gorge is a significant area due to it's steep scarp face. Hard cap rock above layers of softer rock keeps being undercut and breaking off forming the shape of the gorge. Most of the soil in the gorge and in parts of the valley is not suitable for agriculture. Many of the geologic features are unique and would prove interesting for interpretation and provide opportunities for educational field trips.

2.2 Existing Conditions (See Figure 1)

QEW to CNR Tracks 2.2.1

The Valley is narrow with steep vegetated slopes. On the west side near the Red Hill Marsh there is a landfill site. Effluent from the Woodward Avenue Sewage Treatment Plant flows into a section of the Red Hill Marsh. Globe Park, off Brampton Street contains baseball and tennis facilities as well as a small children's play area.

CNR Tracks to Melvin Avenue 2.2.2

The Valley is densely wooded, the creek narrows and is confined at the CNR Tracks, and slopes are irregular. Water quality is extremely poor due to the many sewer mains which empty into the creek upstream. The area is unsightly due to the dumping of garbage by area residents. Trails are undefined.

Melvin Avenue to Queenston Road 2.2.3

On the east side of the creek, there are flat successional fields with scattered trees. Around the creek bed on the west side, the area is densely wooded. The steep slope on the west side is prone to erosion and much loose strata is visible. Trails do exist, but lack maintenance and coordination. Garbage can be found along creek banks, including shopping carts, tires and plastic bags, in the area of McQuesten.

Queenston Road to King Street 2.2.4

The area between the slopes is flat and old orchards trees are still present. Trails are well defined throughout this section of the Valley, and lead through a wooded section into the Red Hill Bowl. The grass is low in most areas. The creek is located on the east side of the Valley, right up against the east bank.

In the area of the Red Hill Bowl there are two baseball diamonds which are well used by the public.

King Street to TH & B Tracks 2.2.5

Moderate wooded slopes in this area lead to a flat area which is open and relatively clear of trees. The grass is generally well kept. Trails pass through from Mount Albion Road to Hixon Road, and continue into the King's Forest section of the Valley.

TH & B Tracks to Mount Albion Falls 2.2.6

The Rosedale area contains many facilities such as baseball diamonds, a soccer field, tennis courts, and an arena complex. Also in this section of the Valley is the King's Forest Golf Course, which is well maintained and receives a great deal of use. This area is wide as it lays on a section of outwash material. Slopes are gentle, making access to the facilities easier.

Trails are well defined and the varied topography provide good views of the escarpment and the surrounding city.

As the trails lead to Albion Falls, topography becomes more rugged. Valley slopes are steeper, paths are narrower, and underlying rock structures can be seen. A section of the Bruce Trail runs through the area along the Niagara Escarpment.

In the Red Hill neighbourhood accross from Glencastle Drive, there are two soccer fields and a small children's playground, located on a flat open field.

At the beginning of the Mount Albion access there is a sandy area of hills which are currently used for riding dirt-bikes. The area at the top of the escarpment is characterized by pockets of open fields and woodlots.

Just south of the dirtbike area is a large stand of mature coniferous forest. A flat open field at the junction of Albion Road and Mud Street is found on which begins the series of hydro towers that run along this top section of the Valley

At the top of the Valley where the creek runs over the escarpment, is located the Albion Falls Gorge. On the west side of the falls there is a park area with a marked historical site. The parking lot is not well maintained. Across Mud Street there is a pond in the creek which was formerely used as a mill pond. Stairs are found leading from Mud Street into the gorge where the falls can be viewed more closely.

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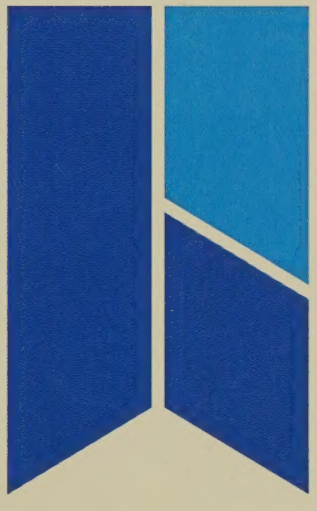

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2.3 History

The area of the Red Hill Creek Valley is rich in historical significance. From the time natural gas was found in the Valley around 1800 (the first in Ontario) to the present, the Valley has had much to offer.

Historically, the first people to settle in the Valley were the Neutrals. This Indian Tribe used the high defensible ground around the Valley and the nearby stream. The Red Hill Creek was known as "Big Creek" to the Indians due to its drop over the escarpment at Albion Falls.

White settlers came to the area in 1786 and the area was surveyed, mapped, and named Red Hill Creek Valley because it was made of red clay.

In 1812, salt manufacturing, an important product at the time because of the war, started in several spots within the Valley. At this time the township of Saltfleet was formed.

On December 30, 1895, the TH&B Tracks were opened and the first train from Toronto to Niagara travelled through the Red Hill Creek Valley.

Around 1900 at Albion Falls, a grist mill was constructed and powered by water from the falls. This mill was once important to the economy of the area and had several owners before it was finally abandoned. The remains of the mill site, as well as one of the grinding wheels, can still be viewed from the Albion Falls area.

In 1932 King's Forest was sold to the City and reforested to be developed for parkland.

In 1939 the City began to acquire land for storm sewers and for connecting the Valley to the Q.E.W.

Farmers were told of future expressway plans, but also the use of land for recreation was mentioned in these deals.

The Q.E.W. was completed in 1939 and opened in honour of a visit from Queen Elizabeth and Prince Philip. A plan was proposed for putting the expressway through the Valley extending to the top of the escarpment. The reason was that Toronto and other major centres were getting ring roads for better access into and around the City. Hamilton wanted to do this also.

In 1948 the City of Hamilton started to buy more property within the Valley. This was done because the city had plans to put storm sewers in the Valley. By purchasing land this would be facilitated.

The first major storm sewer was built on Queenston Road. The Valley had many small field sewers, but no large ones until this time.

The Valley, especially at Melvin and Pottruff, was used largely for recreation. Swimming, fishing, tobogganing and baseball all took place here.

In 1954 the city acquired remaining land between the TH&B Tracks and Albion Falls from farmers with the stipulation that it would be used for recreation in combination with a major road.

In the mid 1950's a second major storm sewer was built in the Rosedale section of the Valley. A third sewer was constructed at Lawrence Road and King Street which combined storm drainage with sanitary wastes. This began the deterioration of the water quality of the creek.

The creek was straightened around the area between Lawrence Road, Mount Albion Road and the TH&B Tracks through the efforts of one landowner who wanted to develop a trailer park. The city would not allow this development in the Valley, however.

There were proposed plans to continue from Parkdale Avenue through a small section of the Valley and connecting to Mount Albion Road near the most northerly section of what is not Glencastle Drive.

Since acquiring the Red Hill Creek Valley the city of Hamilton has let the area deteriorate and allowed pollution of the creek. In its upper reaches, the creek runs through the Upper Ottawa Street landfill site and picks up leachate from the soil in this area. The chemicals the leachate contains are harmful and have led to the depletion of fish and freshwater organisms. The creek is unfit for swimming or water sports. Caliform bacteria are also found in the water due to the city's combination of storm and sanitary sewers which run through the creek.

Questionnaire Purpose 3.1

The purpose of the questionnaire was four-fold: 1) to determine whether people in the area were presently satisfied with their neighbourhood, 2) to determine what recreational facilities were lacking in their neighbourhood that could be incorporated into a recreational, cultural plan for the valley, 3) to determine how the valley is presently being used, and 4) to determine the type of facilities that residents would like to see developed in the future.

A copy of the questionnaire is included in this report together with a discussion of the advantages and disadvantages of the sampling procedure used, in Appendix A and Appendix I.

Sampling Procedure 3.2

Each study team member was assigned specific neighbourhoods in which to conduct interviews. The interviewing process was door to door, during work hours and sometimes in the evenings. The questions were designed to be answered by the head of the household, male or female, but anyone who answered the door could fill out the questionnaire provided they were over 18 years of age. This would give a representation from various age groups.

The instructions given to each member, to ensure the compatibility of results, were that the answers were not to be influenced at all by the interviewer. The respondents were encouraged to express their own opinions. Questions were designed so as not to influence resident's answers by mentioning for example, certain possible development choices.

An explanatory paragraph was provided at the start of the questionnaire, and interviewers were instructed to read it to respondents in order to inform them of the purpose of the interview.

Interviewing took place between the dates of June 7 and July 13, 1982. Responses were then coded and analyzed using the computer system SPSS, at McMaster University. (See Appendix I)

The 15 sampling neighbourhoods (See table 1) were chosen mainly because of their proximity to the Red Hill Creek Valley, and because the inhabitants would be those most likely to use the recreation development in the valley.

To assure the validity of random selection of dwelling units the total population of each neighbourhood was divided by the number of dwelling units to get a ratio of one to a sampling fraction. By drawing from a hat, a random number was then selected within this ratio to determine the actual dwelling unit to be interviewed.

ie. 1100 population in neighbourhood
45 dwelling units
1:24 ratio
9 random number

Therefore, within every 24 dwelling units, the ninth one was chosen to interview.

Since there were many apartment buildings within the study area, each unit was considered as a separate residence. This allowed several units to be selected from one apartment building according to the ratio.

Each dwelling unit was approached a maximum of three

TABLE 1

NEIGHBOURHOODS

NAME	NUMBER INTERVIEWED
Albion Falls	3
Corman	42
Gershome	9
Glenview East	11
Glenview West	23
Kentley	43
Lisgar	22
McQuesten East	12
McQuesten West	63
Parkview East	8
Parkview West	18
Red HIll	40
Rosedale	46
Trenholme	7
Vincent	89
TOTAL	436

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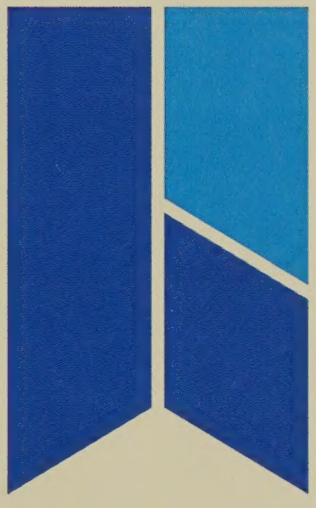

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times by an interviewer. This was the "Recall Method". If a response was not obtained after three times the "Replacement Method" was used, in which case the dwelling unit to the left of the initial one was approached. The same was done if refusals were given before the third contact. (See Appendix B)

3.3 Neighbourhood Consensus

Albion Falls 3.3.1

Most of the popele answering the questionnaire (42.9%) were between 20 and 30 years of age, and about 2/3 had gradeschool aged children (between 6 and 13 years).

Generally, respondents were discouraged from using the Valley because it was undeveloped, unkept, and there was poor access into it. Two-thirds mentioned walking as a leisure activitity suggesting perhaps, that improved trails should be incorporated into this section of the Valley. Present uses of the Valley by those questioned included walking, hiking, and tobogganing.

The developments desired by the area residents (see Appendix E) included picnic areas (33.3%), trails (33.3%), ice rinks (13.3%), and a recreation centre (11%). Residents were generally in favour of a parkland use for the Valley

Most of the possible uses listed in the questionnaire (see Appendix A) would be used frequently by area residents. They were however, opposed to the institution of dirt bike tracks, a driving range, and a drive-in theatre.

Corman 3.3.2

The population of this area was evenly spread with a slight skew towards the 51-65 (22.0%) and 65 and over (19.5%) age groups. Children were of all ages with a higher percentage in highschool (41.5%).

The poor access, pollution, poor safety, and lack of development were listed as reasons against the use of the Valley for recreation.

Residents spend their leisure time in a variety of ways. Thirty-six percent pursued hobbies at home including knitting, playing cards or listening to music. Gardening (9.1%), playing baseball (9.1%), bicycling (25.8%), swimming (9.1%), and walking (42.4%) were also high on the list of leisure activities.

Almost half the residents wanted a thorough clean-up of the Valley. Thirty-seven percent wanted it left the way it was. The general trend was to passive recreation and playgrounds.

Those activities listed that would be used the most in this area were walking trails (90.2%), a nature centre (82.9%), picnic areas (90.2%), a bandshell (80.5%), a garden centre (80.5%), and a conservation centre (95.1%). In addition to being opposed to the drive-in theatre, dirt bike track and driving range, residents stated they would not use cross country ski trails.

Gershome 3.3.3

Fifty percent of the persons interviewed were from 31-40 years of age. There is a large number of children living in this area, many of whom are of preschool age (62.5%). The

need for recreational facilities in this area can therefore, be expected to increase.

Although the community is quite sports minded, listing swimming (58.3%), baseball (12.5%), soccer (12.5%), hockey (12.5%), football (16.7%), and bicycling (12.5%) as leisure activities; they generally showed a lack of interest in using the Valley for these types of recreation.

Developments listed by this group were playing fields, tennis courts, a swimming pool, a recreation centre, and a track and field complex. Thirty-seven point five percent wanted the Valley to be left alone, and 12.5 percent were in favour of the expressway.

Of the proposed uses, the restaurant, dirt bike track, driving range, cross country ski trails, bandshell, observation tower, and orienteering trails would hardly be used by residents of this area. Generally, the other activities would be used sufficiently to warrant development.

Glenview East 3.3.4

Fourty-four point seven percent of this population are below 30 years of age, but about 1/4 are over 65 years of age. There is a relatively even spread of children into all age groups.

Reasons for not using the Valley ranged from no time to being aged or disabled, with the poor safety (11.1%) and lack of development (11.4%) being stressed most. The area was used passively for walking (47.2%), hiking (11.1%) or playing with children (11.1%).

Generally, residents spent their time doing home related activities (42.9%), but fishing, golfing, playing tennis, and travelling were also mentioned.

Fourty-two point nine percent of residents wished the Valley to be left alone, while 14.3 percent wanted it merely cleaned up. Other development suggestions included playgrounds, picnic areas, playing fields, and a swimming poola.

Of the listed proposed uses none would be used by more than 75 percent of the population. In the case of the restaurant, drive-in theatre, dirt bike track, cross country ski trails, orienteering trails, lown bowling courts, and observation tower, use would be considerably less.

Glenview West 3.3.5

One third of the sampled population are over 65 years of age and 57 percent of the children are under 13 years of age.

Reasons for not using the Valley ranged from the pollution of the creek (11.3%), to the lack of development in the area (14.3%). Present uses were walking (50%) and skiing (30%). Walking was also frequently mentioned as a leisure activity (52.1%), as was home related activities (16.7%).

In general, residents wanted to see the Valley used for passive recreation (42.9%). However, 9.5% wanted it left alone, 14.3 percent wanted improved trails, 33.3 percent wanted a recreation centre in the area, and 40.0 percent wanted playgournds to be added.

Of the proposed activities listed in the questionnaire, many would not be used by residents in this neighbourhood to

the extent they would be in other areas. Even so, walking trails, biking paths, picnic areas, a recreation centre, a swimming pool, playing fields, and a bandshell are feasible.

Kentley 3.3.6

About 75 percent of residents in this area are between the ages of 20 and 50. Children are evenly spread into all age groups.

Residents were concerned about the lack of development and lack of police control in the Valley, and listed these as factors discouraging them from using it. Presently, the Valley is used for walking (62.2%), hiking (21.4%), playing baseball (14.3%) and tobogganing (47.6%). Walking and home activities are the main leisure activities of this group, but baseball (14.8%), jogging (21.4%), bicycling (15.4%) and soccer (22.8%) were also mentioned.

Development suggestions included improving accesses (34.5%) marking and maintenance of trails (29.1%), playgrounds (34.6%), and a recreation centre (28.2%). The general trend was a desire to have the area cleaned up and used as parkland.

Walking trails, picnic areas, a recreation centre, a garden centre and a conservation centre would receive the most use by area residents. A restaurant, dirt bike track and drive-in theatre would receive the least use of those activities listed in the questionnaire.

Lisgar 3.3.7

The highest percentage of respondents (35.0%) are between the ages of 31 and 40, and most of the children (45.0%) are of gradeschool age.

The major factor discouraging use of the Valley for recreation was the fact that there are no facilities for people to use. However, walking, skiing and hiking were done by 45.0 percent, 22.5 percent, and 25.0 percent of the respondents, respectively.

Generally the area likes to spend its time walking (21.1%), playing baseball (23.8%),and doing things around the house (23.8%) they would however like too see the valley cleaned up, with picnic areas (22.2%), a garden centre (22.2%), or a recreation centre (22.2%) developed somewhere in the area.

Out of the list of proposed activities, walking trails (60.0%) and a recreation centre (40.0%) would receive the most use. Residents were opposed to the development of a drive in theatre, a dirt bike track, a driving range, orienteering trails and lawn bowling courts, but not to the restaurant as most areas were.

McQuesten East 3.3.8

Seventy-two point eight percent of this sampled population are between 31 and 50 years of age. The majority (54.6%) of children are of highschool age.

The most common reasons listed by this group for not using the valley were the pollution (18.2%) and the problems with biting insects (18.2%). The lack of safety (9.1%) was also high on the list.

By far the largest percentage of respondents spent their leisure time doing things around the home (98.5%). They did, however make use of the valley for walking (27.3%), hiking (9.1%), skating (9.1%) and skiing (9.1%).

In general, respondents wanted the valley to be used as open

space/passive parkland after it was throughly cleaned and cleared with the addition of playgrounds and playing fields.

Walking trails (90%), bicycling paths (90%), a recreation centre (90%), a garden centre (88.9%) were indicated as the things that would receive the most use. As in other areas, the restaurant, drive-in theatre and driving range would be inappropriate developments, as they would not be used as much.

McQuesten West 3.3.9

There is a relatively even spread of adults into all age groups. Children are also fairly evenly spread with a slight skew towards the high school aged group. There are a large number of single parent and low income families evident in this area.

The factors that most concerned residents and prevented them from using the Valley were pollution (53.3%) and the generally unsafe environment due to a lack of policing (21%). A large number of residents were also unaware of the Valley (14.3%) or of the issue at hand.

Leisure activities ranged from home activities (24%), gardening (23%) and walking (14%), to camping (16%), and going out to nightclubs or movies (15.4%).

Residents indicated that they used the Valley for walking (41%), hiking (27.8%), playing baseball (33.3%), golfing (16.7%), and tobogganning (16.7%). They would like to see the area left as it is (20.5%), or used as parkland (86.9%). Specific facilities listed included playgrounds, a swimming pool and improved trails.

The listed activities which received the warmest response were playing fields (80.4%), walking trails (89.5%), picnic areas (87.7%), a swimming pool (78.6%), and a conservation centre (78.6%). There was general opposition to the drive-in theatre and the dirt bike tracks or trails.

PARKVIEW EAST 3.3.10

The majority of respondents were between the 31 to 64 age group (85.8%). Most children (57.2%) were of high school age or older and no preschoolers were noted in the sample.

This group listed the pollution (51%), uncleaniness (14.3%), and poor safety (13.3%) as reasons that discouraged them from using the Valley. They did however take nature walks (14.3%), play baseball (14.3%) and toboggan (14.3%) in the area.

Area residents spent their time in a variety of ways. Sports like baseball (60%), and bowling (14.3%) were listed as walking (34.3%), camping (14.3%) and going out (14.3%).

Most residents (83.3%) urged the cleaning of the Valley and the improvement of trails and access into the Valley as development priorities. A garden centre was also proposed by many (16.7%), but unfortunately topography makes this development difficult in the immediate area.

Response indicated that most of the listed activities would be used sufficiently to warrant their development however, walking trails, bicycling paths, a recreation centre, exercise trails and an observation tower would receive the most use.

PARKVIEW WEST 3.3.11

Respondents in this neighborhood were generally younger with (41.2%) between 20 and 30 years of age and (70.6%) between 20 and 40 years of age. The majority of children (64.8%) were of grade school age.

The reason given by the majority of residents for not using the Valley was the lack of development (41.2%) and poor maintenance (33.3%). However, they did list some of the activities they enjoy in the Valley, including baseball (45.1%), walking (65.1%), hiking (11.8%), tobogganning

(33.3%) and playing with children (20%).

Generally the area spends its time swimming (20.9%), camping (36.8%) playing baseball (30%) and doing things around the house (27.3%). They would however, like to see the Valley cleaned up and used as parkland (55.5%), with a better trail system (55.5%), playing fields (44.4%), playgrounds (46.8%). A recreation centre or a swimming pool were also mentioned but again topography limits development.

While a dirt bike track, a driving range, garden centre and observation tower would not receive enough use by area residents to warrant their development most other proposed activities would, if construction was possible.

RED HILL 3.3.12

In this area (65%) of the residents are between the ages of 20 and 40. Most of the children are grade school aged (35%) but an unusually high number (42.5%) were over 19 years of age.

Many respondents listed the lacked of development (35%), poor upkeep of existing facilities (32.5%), pollution (25%) and poor access (12.5%) of the Valley as reasons discouraging them from using the area for recreation. However, walking (64%), playing baseball (30.9%), hiking (30.3%) and tobogganning (55.3%) were some activities residents mentioned indicating that they do indeed use the Valley.

Leisure activities of this group were very diverse but walking (67.3%), playing baseball (27.3%), hiking (11.5%) and picnicking (10.8%) were enjoyed by most. Residents made several suggestions as to how the Valley should be developed. Some wanted the area left as it is (41.7%), others wanted it used as parkland, with improved trails and better access (39.2%). Still others listed specific facilities they thought would be useful, like a recreation centre (43.3%) and a swimming pool (57%).

By looking at the suggestions listed about half the listed activites would receive sufficient use to warrant their development.

ROSEDALE 3.3.13

Population is well spread between all age groups with a lower percentage (9.1%) above 65 years of age. Children tend to be older, as most are in the high school (40.9%) or above high school (25%) age groups.

The factors discouraging residents use of the Valley were mainly the pollution of the Creek (23.8%), the lack of police control (24.2%), and the generally poor safety of the area (12.5%). Those that used the area did so for playing baseball (86.3%), golfing (12.4%), skiing (10.8%), hiking (22.5%), tobogganning (18.2%) and walking (59.5%).

Many of the leisure activities listed by the residents correspond to the activities done in the Valley, with the exception of home activities (8.3%), suggesting that the Valley is used as a local recreational resource by the community.

Development suggestions ranged from cleaning that area up (41%)and improving trails (29.5%), toconstructing playing fields (9.5%). The most common response was to develop a swimming pool in the area particularly in the vicinity of the Rosedale Arena.(76.4%).

Almost all the proposed listed activities would receive sufficient use by the community to warrant their development.

TRENHOLME 3.3.14

The largest percentage of people in this neighborhood are between the ages of 20 and 40 (71.5%). By far the most children are of grade school age (57.1%).

The poor means of access into the Valley was a major concern discouraging it's use by this neighborhood (14.3%). Also, (14.3%) of respondents said they were unaware of it's recreational potential.

Leisure activities included camping (25%), hiking (14.3%), bicycling (25%), baseball (25%), tennis (14.3%), soccer (25%), golfing (28.6%), home related activities (14.3%) and walking (28.6%). The Valley was used for walking (39.3%), hiking (39.3%), picnicking (42.9%), nature studies (50%) and golfing (14.3%).

The highest percentage in this area (57.2%) wished the Valley to be left alone or used as passive parkland. This included such additions as improved access, washroom facilities, improved trails and general clean up.

Of thos activities suggested in the questionnaire, response indicated that walking trails, picnic areas, a bandshell and a garden centre would be used by all sampled residents.

VINCENT 3.3.15

This sampled population is quite a bit younger than most other neighborhood, as 38% are between 31 and 40 years, and over 70% between 20 and 40 years of age. There are a great deal of children in this neighborhood and they are well spread between all age groups.

Residents were discouraged from using the Valley because they felt it was not properly maintained (6%), unsafe (7.5%), lacked acces (7.5%). Present use of the area includes participation in activities such as walking (64.3%), hiking (63.2%) and tobogganning (7.7%).

The area is generally recreation minded listing swimming (41.7%), bicycling (25.2%), playing baseball (16.7%) and camping (17.8%) as leisure activities.

Several residents felt that the Valley should merely be cleaned up (93.8%). Others listed facilities they would like to see developed such as improved trails systems, playgounds and playing fields.

Most of the listed proposed activities would be used by residents

TABLE 2

USE OF VALLEY BY NEIGHBOURHOOD

Summer

		Never	Occasionally
Albion Falls	Number	1	2
	Percentage	33	67
Corman		26	15
		63	37
Gershome		5	3
		63	37
Glenview East		4	5
		44	56
Glenview West		15	6
		71	29
Kentley		25	16
		61	39
Lisgar		9	11
		45	55
McQuesten East		6	5
		55	45
McQuesten West		31	26
		54	46
Parkview East		4	3
		57	43
Parkview West		8	9
		47	53
Red Hill		10	30
		25	75
Rosedale		11	34
		24	76
Trenholme		2	5
		29	71
Vincent		44	41
		52	48

TABLE 3

USE OF VALLEY BY NEIGHBOURHOOD (cont'd)

Winter

		Never	Occasionally
Albion Falls	Number	1	2
	Percentage	33	67
Corman		33	8
		81	19
Gershome		6	2
		75	25
Glenview East		6	3
		67	33
Glenview West		27	4
		81	19
Kentley		29	12
		71	29
Lisgar		10	10
		50	50
McQuesten East		7	4
		64	36
McQuesten West		36	20
		64	36
Parkview East		4	3
		57	43
Parkview West		10	7
		59	41
Red Hill		14	26
		35	65
Rosedale		19	26
		42	58
Trenholme		3	4
		43	57
Vincent		50	35
		59	41

TABLE 4

PERSONAL USE

		GREATLY INCREASE			NEUTRAL			GREATLY DECREASE
		1	2	3	4	5	6	7
Albion Falls	Number	1			2			
	Percentage	33.3			66.7			
Corman		11	9	6	11	1		
		28.9	23.7	15.8	28.9	2.6		
Gershome		5	1	1	1			
		62.5	12.5	12.5	12.5			
Glenview East		1	1	1	5			
		11.1	11.1	11.1	55.6			
Glenview West		11	4	1	4		1	
		52.4	19.0	4.8	19.0		4.8	
Kentley		24	8	4	5			
		58.5	19.5	9.8	12.2			
Lisgar		14	4		1			
		73.7	21.1		5.3			
McQuesten East		6	2	1	2			
		54.5	18.2	9.1	18.2			
McQuesten West		21	12	7	12	1		3
		37.5	21.4	12.5	21.4	1.8		5.4
Parkview East		4	3					
		57.1	42.9					
Parkview West		9	2	1	5			
		52.9	11.8	5.9	29.4			
Red Hill		24	6	3	3	1	1	1
		60.0	15.0	7.5	7.5	5.0	2.5	2.5
Rosedale		16	17	6	2			
		39.0	41.5	14.6	4.9			
Trenholme		4	3					
		57.1	42.9					
Vincent		20	25	8	20	1	1	5
		25.0	31.3	10.0	25.0	1.2	1.2	6.3

although not to the degree that they would be in other areas.

The problems associated with the Valley that residents indicated discouraged them from using the area, must be considered development priorities, as they will have to be changed before the Red Hill Creek Valley can be used as a recreational resource.

For general neighborhood use,,see Tables 2, 3, and 4.

For detailed data on neighborhood consensus see Appendix C and theComputer Printout of the questionnaire results.

NB: Only 1 copy of the Computer Printout is avaailable due to costs.

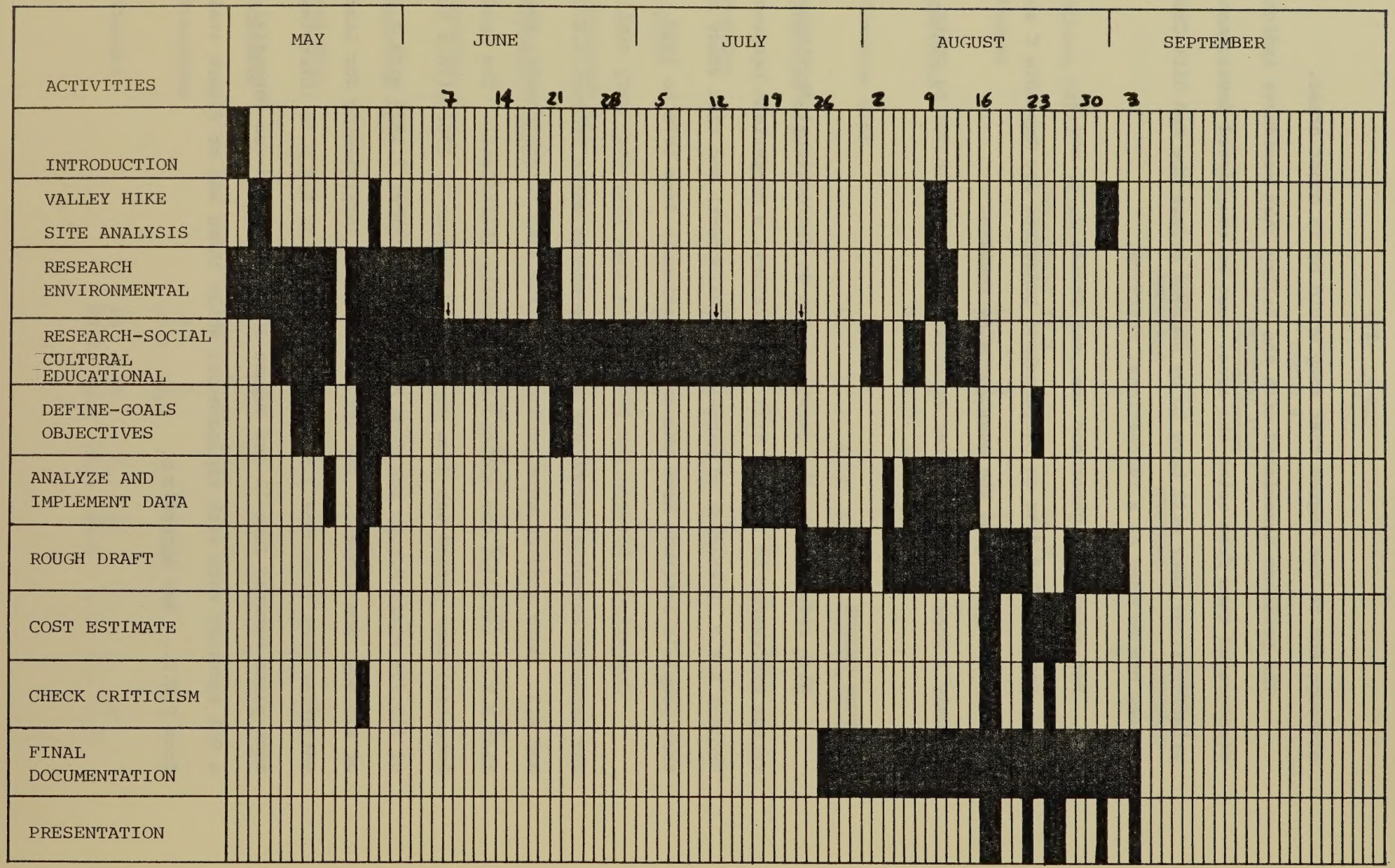
ATTITUDE CHANGE 3.4

With reference to the questionnaire on recreational development versus expressway in the Red Hill Creek Valley, a comparison between Project R.E.D. (Research on Expressway Development) and this study show that people's attitude have changed dramatically from 1979 to 1982.

Comparisons between the two studies show they were very similar. The Land-Use Potential study had 414 respondents while Project R.E.D. had 413. Both studies were conducted in the same neighborhoods, except that R.E.D. included one additional community (Saltfleet). The Land-Use Potential time period was from May 10 to September 3, 1982 with a budget of $15,759 while R.E.D. ran from May 22 to September 7,1979 with a budget of $13,654. See Table 5. The actual dates of interviewing for Land-Use Potential were from June 7 to July 13, 1982 while R.E.D.'s interviewing took place between June 11 and August 20, 1979. Land-Use Potential had a 95% accuracy rate with replacements while there was no figure available from R.E.D.. See Appendix B.

TABLE 5

TIME ALLOCATION CHART



The research methodology done by Project R.E.D. in 1979 was a very credible study which followed the guidelines of survey research. Their results gave valuable information as to what people would like to see developed in the Red Hill Creek Valley. The same expert consultant in statistical research from McMaster University was consulted on the design and distribution of the questionnaire and also on the computer analysis of the results.

The results of Project R.E.D. formed the base for the research discussed in this report. Questions were designed for our purposes, but some questions were asked that related to Project R.E.D. so that cross-referencing could be done.

As stated the questions that were asked in the two surveys were indeed different. The questions can, however, be compared and a similar result will then be evident. In 1979, survey respondents were asked if they would favor an expressway going through the Red Hill Creek Valley. In 1982, two questions (#9 and #12) on the questionnaire (see Appendix A) were asked. These were:
#9 How would you like to see the Valley developed in the future?, and
#12 How satisfied would you be with your neighborhood if: a) the Valley was used for an expressway?, b)the Valley was developed for recreational purposes?.

The research done by R.E.D. in 1979 indicated that 46.7% of respondents were in favor of an expressway going through the Red Hill Creek Valley. The 1982 results illustrate that only 10.9% would be satisfied with any type of transportation corridor through the Valley. See Chart 6.

The breakdown indicated that 76.4% of those interviewed would be dissatisfied with such a development while the remainder were neutral. Thus there has been a sharp decrease of 35.8% in the number of residents who believe an expressway going through the Red Hill Creek Valley is necessary.

TABLE 6

RECREATIONAL DEVELOPMENT

	EXTREMELY SATISFIED			NEUTRAL			EXTREMELY DISSATISFIED
	1	2	3	4	5	6	7
Number	247	76	29	40	5	6	6
Percentage	60.0	18.4	7.0	9.7	1.9	1.5	1.5
		352		40		20	
		85.4%		9.7%		4.8%	

EXPRESSWAY

	EXTREMELY SATISFIED			NEUTRAL			EXTREMELY DISSATISFIED
	1	2	3	4	5	6	7
Number	22	11	12	52	17	37	261
Percentage	5.3	27.0	29.0	12.6	4.1	9.0	63.3
		45		52		315	
		10.9%		12.6%		76.4%	

Project R.E.D.

RECREATIONAL FACILITIES

	SATISFIED	DISSATISFIED
Percentage	75.3%	24.7%

EXPRESSWAY

	SATISFIED	DISSATISFIED
Percentage	46.7%	53.3%

TABLE 7

USE OF VALLEY

		Never	Occasionally
1979	Summer	44%	56%
	Winter	54%	46%
1982	Summer	48%	52%
	Winter	59.6%	40.4%

NB "Occasionally" incorporates less than once per month, once per month, less than once per week, once per week, and more than once per week, as taken from the questionnaire.

The attitude change of those interviewed seems to be very positive in terms of public acceptance of a recreational/open space development of the Valley as opposed to the proposed expressway. In comparing the 1979 and 1982 crosstabulations it is apparent that people's attitudes have indeed made a significant turn.

When comparing the use of the Valley some interseting observations can be made. Firstly, people are using the Valley 4% less in 1982 than in 1979 for the late spring, summer and early fall months. See Chart 7. This may be due to the fact that nothing has been developed in the Valley over the last few years. The Valley has not been maintained, grass has not been cut and garbage not cleaned up. These factors have discouraged people from using the Valley as has been mentioned in earlier sections of this report.

Secondly, there has been a 5.6% decrease in the use of the Valley in the winter. See Chart 7. This may be due to lack of development and improvement of crosscountry trails throughout the Valley and the stopping of winter flooding of some outdoor skating rinks by the city.

In comparing the methodology of both studies it can be concluded that both were valid and reliable pieces of research and we can safely say that attitudes have, in fact, changed with respect to the Red Hill Creek Valley.

DESIGN OBJECTIVES 4.1

Our intent was to design a recreational area, primarily for local use, but also that would be attractive to people from outside the area, and possibly from outside the city. The task was to design an alternative to the proposed expressway running through the Red Hill Creek Valley. Also considered was the need for a recreational greenspace within the East End of the City of Hamilton.

PARAMETERS 4.2

Certain restrictions had to be kept in mind when designing. The feasibility of the project depended largely on the implementation and cost.

The design was done with the intent that the costs be below the total cost of the expressway. Also, it had to be ensured that the facilities proposed would be used sufficiently to warrant their development.

The need for recreational space is confirmed in the social, cultural and demographic patterns of the local neighborhoods involved.

Further, that areas around the Red Hill Creek Valley are the second highest crime districts within the city. See Appendix D. Illegal activities are within the undeveloped, forested lands of the Valley. Design measures must be complementary to proposed uses and at the same time discourage undesired ones. For example, lighting will encourage the use of tennis courts at night, while at the same time discouraging vandals. Other design measures to be incorporated in the plans that would help prevent crime include: fences, sturdy structures, signs, picnic tables benches etc., must be bolted down.

Surveillance should be maintained and violators prosecuted. Potentially vandalized structures should be grouped together for easy viewing. It is hoped that with the use of this community recreational resource the attitudes of young people will change so they will become more concerned about their

neighborhood and be less inclined towards vandalism. Also, the pride that residents will have in the recreation development may encourage them to keep watch on facilities and report on any criminal activities.

The population in some sections of the neighborhoods adjacent to the Valley is high enough to warrant the addition of recreational to the 1970 standard of 10 acres per thousand people.[3] By designing cultural features, users from outside the local area will be attracted, possibly from outside the city, that may not have these activities of social and cultural context.

Within the local neighborhoods, there exist low income groups to which recreational activities are not easily availble. The proposed area could help serve the needs of these groups by making cultural and recreational facilities open to them at little or no cost. In addition, due to economic conditions all members of the community therefore require some type of facility that is nearby and relatively inexpensive.

The Valley is prone to flooding throughout due to the design of city storm sewers which drain into the creek as a means of transport to the Hamilton Harbour. The problem is complicated further by the culverts that are not large enough to accomodate additional flow during rainstroms. If nothing is done to enlarge the culverts below the roads park facilities must then be designed with flooding in mind, and structures must be constructed above floodlines.

Some areas of the Valley have slopes that are prone to erosion and hazardous to construction. Erosion is also a problem on these slopes as it hinders recreation below. Preventitive measures must be taken to reduce the possibility of landslides.

Most of the Valley has steep slopes. Some areas have wide flat, flat plains between slopes, while other areas the creek is confined between two high banks. The relief in general and the amount of space

between each slope restricts the choice of facilities to be constructed. Relief must also be graded and flattened, where possible, to allow for the development of playing fields, accesses and paths.

Vegetated areas must be assessed to determine whether they should be cleared to provide land for development and eliminate insect habitats, or whether they are significant aesthetic or educational resource. Environmentally rare or endangered vegetation must be protected, as must vegetation that serves as food or shelter for wildlife. Any diseased tree must also be removed before spreading.

Existing facilities and uses must also be kept in mind when designing, to co-ordinate uses and to prevent cluttering and duplications. The feasibility of construction of the plans must be verified by the Hamilton Region Conservation Authority and the City Planning Department.

DESIGN PROCESS 4.3

Data relating to the proposal and restrictions had to be collected and analyzed. From this, viable ideas were produced, and solutions to problems were resolved, through constant checks and collecting of additional information. Feedback was also obtained on interim plans from concerned authorities.

The plans were then evaluated in terms of cost, amount of use the area would receive, how suited to people's needs they would be ten to twenty years from now and the time needed to obtain city approval and funding.

Documentation of construction specifications considering the time delay was then compiled. Cost estimationswere done at present standards, from United States, including labour, overhead and profit.(Only data

available). An index could then be applied to project future costs caused by the escalation of prices, and to account for the difference in Canadian and U.S. funds. Drawings were also made to correspond to city design standards.

Recommendations

QEW to CNR tracks 5.1.1

The following neighbourhoods are affected by these recommendations: Parkview East, Parkview West. See Figure 3

This area requires cleaning up of garbage and clearing of brush in all sections.

The marsh at the mouth of the creek should be fenced off and left undisturbed to allow rehabitation by waterfowl. The continued dumping of incinerator ash from the Woodward Avenue Sewage Treatment Plant could jeopardize this rehabitation process. The chemicals found in this waste product, though they are below M.O.E. standards, and frequent dredging of the site could prove to be discouraging factors to the nesting of such birds. The city should refrain from using this unique area as a settling pond, or reduce the amount of waste being dumped.

There are plans at this time for a system to be installed by 1984 which would allow for the separation of incinerator ash from waste water right inside the plant; eliminating the need for the Red Hill Marsh as a settling pond. Hopefully, after this practice has been stopped, the marsh will regain its potential as a nesting site for waterfowl.

A larger sewer culvert is needed at the CNR tracks to take in creek overflow, and lower the Regional Storm Floodline, upstream.

The residents in the neighbourhood adjacent to the creek in this area expressed a desire to see more playing fields, trails, and a swimming pool developed in the area. See Appendix E. Unfortunately, the area is not suited to these recreational

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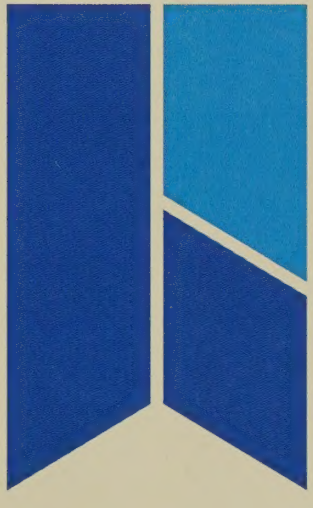

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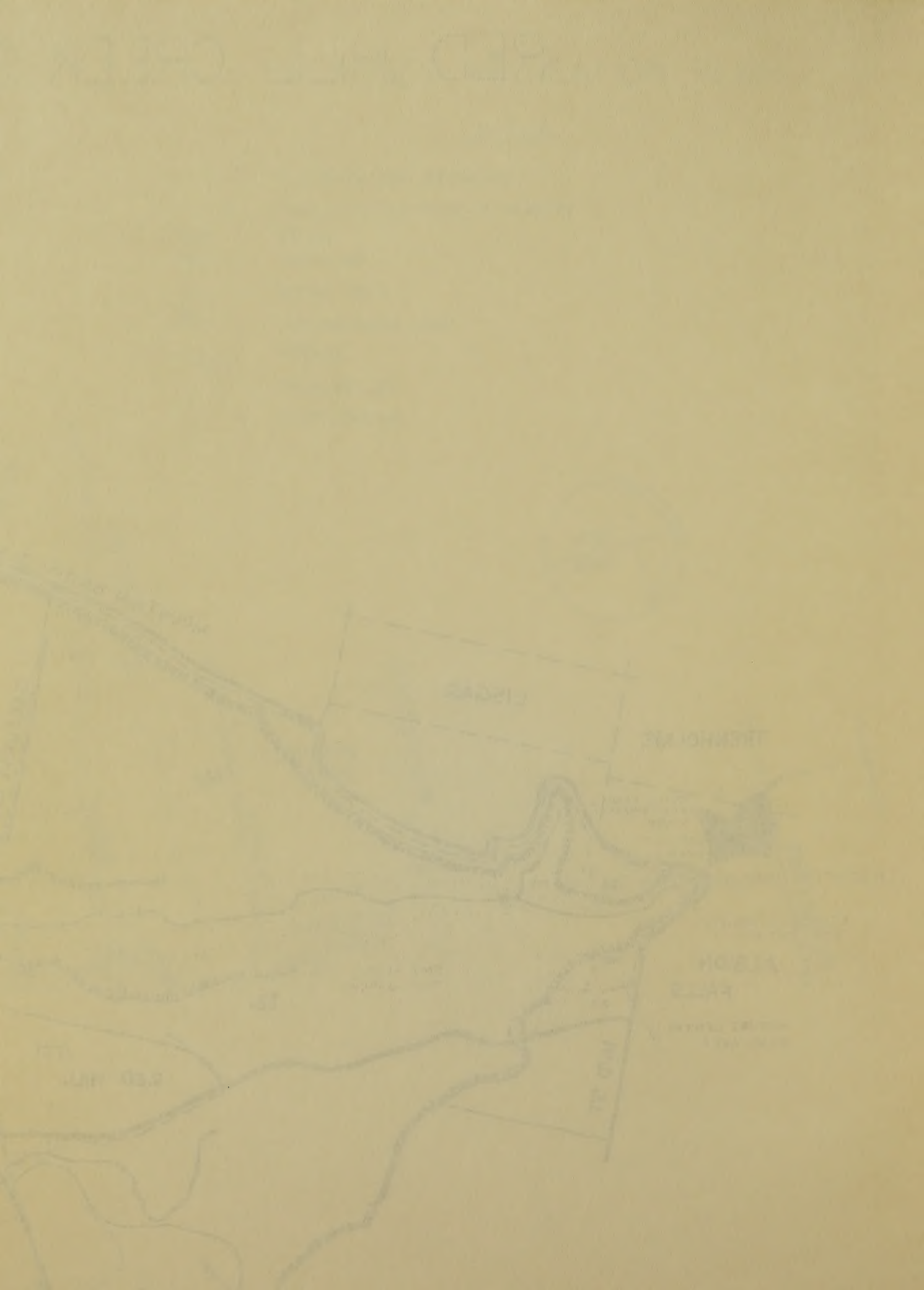

developments. The topography is steep and the valley too narrow for development and a city landfill site on the west bank also poses problems. Globe Park may be used by residents where playing fields are available nearby, and not far away is the beach/pool at Confederation Park.

CNR tracks to Melvin Avenue 5.1.2

The following neighbourhood is affected by these recommendations: McQuesten East. See Figure 3

This area is fairly wide at Barton Street, but narrows to a marshy section near the CNR tracks.

A large amount of clean up and brush clearing is necessary in this area to provide open space for parkland and to eliminate insect environments. Spraying might also take palce to prevent mosquito breeding in this area. The creek embankments must be maintained properly to prevent excess erosion. The existing trails must likewise be improved and maintained as far as the CNR tracks, possibly by using wood logs crosswise and then revegetating, or by cutting terraces and then planting trees on them.

Neighbourhood analysis shows that residents would like to see this area of the valley used as parkland and listed a swimming pool as a desired facility. See Appendix E.

An access into the area should be constructed from Barton Strees and Nash Road, west into the open field below, so that the area can be utilized as open space/parkland.

Melvin Avenue to Queenston Road 5.1.3

The following neighbourhoods are affected by these recommendations: McQuesten East, McQuesten West, Kentley. See Figure 3

Cleaning up of garbage and clearing of low brush and some trees along the creek bank is recommended for this area. This must be done selectively so as to maintain an edge environment which is necessary to a balanced ecosystem. See Appendix H. Erosion barriers must be installed along the west bank of the creek along Queenston Road and behind Lang Avenue where the slopes are very high and steep. Here steel poles could be erected upright and wood logs installed crosswise between them to form a manmade slope flat at the top of the valley bank.

A tree belt of appropriate height should be planted along the slope at Queenston Road, to serve as a noise buffer to the recreational area below. This will also provide an aesthetically pleasing view from the roadway. Instead of this, or in combination with this tree barrier could be a concrete noise barrier that could also serve as a graffiti board to be painted over regularly.

Lighting should be installed throughout the park in this section to discourage crime and vandalism as the area is known to be a high crime district within the city.

The neighbourhoods adjacent to this section of the valley listed better access and more trails, as well as a pool, playgrounds and picnic areas as facilities they would like to see developed in their area. Generally, they stated that their preference was to use the land as a park. See Appendix E.

Off Pottruf Road and Melvin Avenue, there is a flat circular area of sodded land which would be suitable for a creative children's playground, possibly including a wading pool. Trails lead into the wooded sections surrounding this section from both sides. These foot accesses can also be made to connect to the playground. Several bridges are needed to allow hiking and bicycling in this area, as there is a large and varied network of trails already existing, but which require improvement. One of the major trails could be converted into a bicycle path, which is wide enough to accomodate bicycles, pedestrian traffic, and wheelchairs.

Behind the housing development on Oriole Crescent, there is a flat playground area which connects with St. Helen's School on Melvin Avenue. Some of the foot accesses up the west bank of the valley lead to this area. Incorporated into the use of this large field should be the construction of a permanent garden centre building.

The lands associated with this facility could extend down into the valley on the west side of the creek where the topography is relatively flat, but where vegetation must be cleared. This centre can be easily tied into a Community Garden Project, or to use by local schools for extracurricular activities. A service road leading from St. Helen's School, Hillcrest, or East Haven School should be built to allow maintenance and administration at the centre. A water supply for the gardens can be obtained through one of the school water mains as well.

CREATIVE PLAYGROUND AREA

POTTRUFF RD. & MELVIN AVE.

GARDEN CENTRE

BEHIND HILLCREST PUBLIC SCHOOL

Steep embankments should be avoided when planning trail routes or service roads and any maps of the area should make their existence known. Stairs and proper grading should be included to allow easy access into the playground from Oriole Crescent. However, any grading must be done in a proper manner so as to maintain floodplain characteristics; ie) use of fill from the area to grade, maintaining storm sewer holding capacity. See Appendix F. Slope downflow should be studied and controlled to ensure that accesses are not washed out.

On the east side of the creek, a parkland/picnic area, with benches, baseball diamonds, and possibly tennis facilities is proposed. A basketball court should also be provided where teenagers could play unorganized games. In winter this court could be flooded for an outdoor ice skating rink.

Low brush and some trees adjacent to the creek must be cleared. Underbrush should remain in the wooded creek area as a source of food and shelter for birds and animals. See Appendix H. A main bicycle path could extend through this area to Queenston Road. The picnic area should be re-sodded and additional planting of shade trees should be undertaken, keeping in mind the soil and water characteristics of the area. Along Queenston Road, a permanent pathway should be constructed beside the afforementioned tree belt.

All along Pottruff Road there are several open spaces at the top of the valley slopes which could be made into small parking lots to accommodate up to 80 cars. Almost at the corner of Pottruff and Queenston Roads, there is a gently sloping access road which

PARK AREA
QUEENSTON & POTTRUFF N.

could accommodate service vehicles and pedestrian or bicycle traffic. Paving of this acces is recommended as is the installation of a handrail on one side to allow for use by the handicapped. The slope could be graded to 1/12 and possibly zigzagged for wheelchair traffic. This road should be connected with the main bicycle path.

Washroom facilities and drinking fountains should be located within the picnic area and at the Garden Centre. All playground and picnic facilities should be made as vandalproof as possible.

In winter this section lends itself easily to cross-country skiing and the steep hill at Queenston Road could be used for tobogganing. Barriers should be properly erected on ski trials to discourage snowmobile use.

QUEENSTON ROAD to KING STREET 5.1.4

The following neighborhoods are affected by these recommendations: Glenview East, Glenview West, Corman. See Figure 3

This area should also be thoroughly cleaned and cleared of low brush. Some spots must be graded to form a uniformly flat topography. The central zone, where there are few trees, is in special need of such measures. The bicycle trail can be extended from Queenston Road to King Street and into the Red Hill Bowl.

Off Pottruff Road south near Queenston Road, an existing access can be widened and paved to form a parking lot which would accommodate up to 40 cars. From this spot a path could be cut over the top of the culvert that drains beneath Queenston Road. It must be wide enough for both bicycle and pedestrian traffic. This path would lead to a flat table area atop a hill of sodded landfill. This area is also

suitable for the construction of a creative playground for children. In addition, the trial should connect to the main bicycle path which could run through the centre of the Valley. Another path running from the south side of Queenston Road along the west bank of the Valley, near Reid Avenue, will connect to the central bicycle trail. The culvert in this area must be improved to allow larger streamflow and to lower the regional storm floddlines. This will then free areas of land for development. See Appendix F.

Construction of a small bandshell in a cleared, leveled area at the foot of the Valley near Central and Reid Avenues is also feasible. At the junction of these streets there is an existing path down the west slope leading to this bandshell area. Stepping of this path can be done to make access easier. Natural tree cover on the slopes could serve as anoise buffer for this social and cultural area. The open face of the bandshell should face in a southeast direction so that neither performers nor audience will be facing the sun.

The topography of the area slopes slightly in the direction of the bandshell, which facilitates viewing. Benches may be provided for spectators or natural seats may be formed. All electrical equipment must be kept high and out of the way of rising water during flood times. Shade must be maintained as comfort to viewers.

This area could also include a croquet field or bocce courts. Washrooms and drinking water facilities should be provided somewhere nearby the bandshell. Also in this vicinity, possibly along the slopes behind the bandshell, some type of rock garden flower bedswould increase the sites aesthetic beauty and provide conversational topics among users of the area.

BANDSHELL & PLAYGROUND AREA
QUEENSTON RD. & REID AVE.

The rest of the west side of the creek can be used for passive recreation and picnicking, as these were two things most frequently mentioned ay area residents as potential developments.

A bridge to cross the creek should be located directly below Garvey Crescent. Picnicking can also take place on this east side of the creek. Also in this vicinity a small garden area can be planted and be maintained by the Parks Department while another restroom complex is also proposed.in the area.

In the Red Hill Bowl, an improved access with parking facilities should be designed. This might be facilitated by adding a 80' to 100' third lane along King Street running west from Mount Albion to be used as a turning lane into the park. The exixting access will have to be graded, again ensuring that floodplain characteristics are not changed.

From the Red Hill Bowl parking lot, pedestrians should have access to a path leading to the existing baseball diamonds, and another one leading to the main branch of the Valleywhere the picnic areas, bocce courts, flower gardens and bandshell are located. This requires the construction of an additional bridge to cross the creek. The crossing of the bridge could lead to a nature study area or arboretum with marked trees as there is a significant stand of Carolinian hardwood. See Appendix G.

KING STREET to T,H.&B. TRACKS 5.1.5

The following neighborhoods are affected by these recommendations: Rosedale, Red Hill. See Figure 3

This area requires little or no clearing of brush and trees, as it is relatively flat and lies between two steep slopes. Pedestrian and bicycle acces already exists from Mount Albion Road and can be improved

and extended through this section to Hixon Road near Parkdale Avenue where there is already a bridge which crosses the creek.

Uses for the flat area between the slopes could include soccer field or track and field complex. Lighting is a possibility but not a necessity. In winter, the slopes lend themselves to tobogganing and the soccer field could be flooded to form an outdoor ice skating rink.

On the corners of Lawrence Road and King Street, there are two, small, empty, municipal lots which could be made to look more appealing by installing flower boxes and plants on them.

T.H.&B. TRACKS to ALBION FALLS 5.1.6

The following neighborhoods are affected by these recommendations: Rosedale, Red Hill, Vincent, Gershome, Albion Falls, Trenholme and Lisgar. See Figure 3

Clearing of brush and garbage removal is required for most of this section. Several bridges are in existence, mostly in the area of King's Forest Golf Course, however, more should be added where necessary.

In the vicinity of the Rosedale Arena, regular maintenance and patrols should take place to keep the area up to its present standards. The addition of a swimming pool to the Rosedale Arena complex is also a possibility to be explored.

On the west side of the Valley near Albion Falls, runs a section of the Bruce Trail along the Niagara Escarpment. Trails are well marked through areas of unique flora.

The Albion Falls Gorge area should be improved aesthetically to enhance its potential for geological interpretation. Generally, the area around Albion Falls is to be used as an open space conservation area.

SOCCER & TRACK FIELD
MT. ALBION & KING ST.

The neighborhoods bordering the Valley in this section expressed the need for parkland and mentioned specific facilities such as a swimming pool or playgrounds as things they would like to see developed in their areas. See Appendix E.

The main path will run south through a tunnel underneath the TH&B tracks alongside of the creek leading into a flat area below the Rosedale Arena complex where baseball fields and tennis courts already exist. Vehicular access will require widening and go around the Arena. The tunnel will also require widening and heightening of the existing drainage culverts are needed to aid in the lowering of the regional storm floodline.

The main path will split into two, one on either side of the creek, at the start of the King's Forest Golf Course just beyond Greenhill Road. A bridge should be constructed here for crossing of the creek. The east path should continue to Mud Street near Albion Falls, but the west branch will have to end where terrain becomes too rugged near the bottom of the falls.

A staiway access leading from a bicycle path at the end of Greenhill Road is proposed into the Valley on the east side. From here a path should connect to the main paths. These paths should be constructed in a manner that will discourage washing out during flood times.

Behind Glencastle Drive there is a large area of manicured lawn on which two soccer fields and a children's playground are located. Lighting should be installed in this recreational area, and the playground should be expanded with the possible inclusion of a basketball court. Another use for part of this land would be to construct bocce courts as the area is presently used in this manner anyway.

PEDESTRIAN & BICYCLE
UNDERPATH
AT T.H.&B. TRACKS

Farther south on Albion Road past Glencastle Drive, a parking lot could be constructed to accomodate hikers, BMX riders and spectators. At present, there are rolling hills near this area which could be converted to BMX cycling trails. Motorcycling currently exists on these hills and many residents have expressed their opposition to the noise created.

A nature/education centre could be located on a flat empty field near the corner of Mud Street and Albion Road. From here, nature walks and study excursions can begin and continue through some of the smaller trail networks in the Valley and in Albion Falls Gorge. Located at this centre, there should be washroom facilities, drinking fountains and picnic/rest areas, including bar-b-que pits. A playing field could also be constructed in this area. Some parking facilities should be made available, and overflow can be accomodated at the parking site past Glencastle Drive.

A third turning lane is also recommend for the corner of Mount Albion Road and Mud Street. This would ease the traffic problem at the corner. This lane could handle traffic into the nature/education centre and with the possible addition of a traffic light traffic would flow much smoother.

On the west side of the creek where there is a junction with a smaller stream, an open area exists which could easily lend itself to a picnic area with benches and bar-b-que pits. This area should be cleared slightly to create more recreational space.

At the Albion Falls Gorge, scenic points of interest should be marked and made easily accesible to pedestrains. Lookout points and stairs should be constructed on the east side of the Gorge and clearing of most scenic points is necessary. A special point of interest is along the old Mud Street route where the entire length of the Valley can be seen as far as the lake, and from here the radiating shore of Lake Ontario can be followed with the eye, right up to the CN Tower in Toronto. Stairs can be located

BMX TRAILS

UPPER MT. ALBION RI

TOBOGGANING HILLS

UPPER MT. ALBION RD.

at this point to improve an existing access into the Valley.

A stairwell exists on Mud Street at the point where it curves around the falls. This leads to a plateau adjacent to the falls where a scenic lookout point can be developed. From here a natural rock footpath extends to the bottom of the Gorge.

On the other side of the falls, at the city park site along Mountain Brow Road, improvements should be made by maintaining the parking lot, adding picnic tablesand possibly a refreshment stand. A lookout deck can be located adjacent to the parking lot where the falls and the gorge can be viewed; with some clearing of tree branches. This area is noted for being a historical mill site, and from the deck the old homes of early setters in the area can be seen also.

The Rosedale Community Centre, could sponsor the development of orientering trails, exercise trails, nature study walks and cross-country trails in the winter.

The neighborhoods of Lisgar, Trenholme and Albion Falls are of small population density and are at the early stages of development, therefore, their suggestions as to the development of the Valley were implemented but not with as much equity. Possibly, Bernie Arbour Stadium and the Mohawk Sports Complex could serve some of their present needs.

Throughout this top section of the Valley, Areas are to be left as natural as possible to provide a haven for birds and animals that are sensitive to heavy recreational use of their environment. The species whose habitats have been altered due to clearing and construction may then recover to theirnatural state.

Alternatives 5.2

An alternative use for the land adjacent to Mount Albion Road would

OBSERVATION DECK

ALBION FALLS GORGE

be a small horseback riding area, since the trails are already present and nature of the wooded areas are complementary to this activity. There is room for a stable in the open fields and a concession could be given, or boarding fees charged to the interested owners.

Other alternatives to be added to the conservation centre at Mount Albion Road and Mud Street include a small native wildlife compound, or an arboretum of native trees, as a section of Carolinian hardwoods is found nearby. Interpretive nature walks can also take advantage of this stand.

ADDENDUM 5.3

Any fences around tennis courts or pavilions should have sheer pins so that if flodding occurs they can easily be removed for cleaning and re-erecting.

The covered pavilion should have hollow block concrete pilars holding the roof above flood level. The tables should be firmly anchored so that they do not get carried away during floods. All picnic areas must be equipped with garbage areas.

Any bridges should be firmly anchored to one side so that they are able to lift up during flood times, but remain in one spot, again so they do not get carried away.

Exercise trails can be incorporated throughout the entire Valley even if they are administered by a community centre such as Rosedale.

The main cycle path through the entire Valley will need to be paved in some sections, but in others where it is above floodlines, it will only require widening and smoothing measures.

Although motocross and snowmobilling now take place in some of the areas for which we have proposed other uses, these are expected to decline

with additional recreational use and the discouragement measures proposed. These include signs prohibiting use, prosecution of offenders and fences.

Present ownership of the Red Hill Creek Valley lies with the Engineering Department of the City of Hamilton which has been given the responsibility of maintenance. Ownership or management should be transferred to the Hamilton Region Conservation Authority or to the City Parks and Recreation Department. This is strongly recommended as it would greatly facilitate the development of the area for recreation.

Maps of trails and information pamphlets should be produced and made readily available to the public to encourage them to take advantage of the facilities available there.

5.4 COST ESTIMATES

FACILITY	DESCRIPTION	COST
C.N.R. TRACKS to Barton Street 5.4.1		
Litter Receptacles	One 40-gallon barrel	$ 25
Clear Area	3 acres of cleared bush, garbage, etc.	$ 4,500
Benches	Pine or fir, steel pipe pedestal, embedded	$ 744
*Culvert	Increasing size of existing culvert	
Melvin Avenue to Queenston Road 5.4.2		
Creative Playground	All component structure, two 4' high platforms, two 6' high platforms, beam and suspension bridges, one 16' x 18' slide, one 12' x 18' slide, horizontal ladder, fire pole, balance beam, tire and belt swings, chain ladder, sandbox (pentagon 100 sq. ft.)	$ 13,500
Wading Pool	40' x25', 3'deep end, 1'6" shallow end	$ 50,000
Benches	11 backless, pine or fir, steel pipe pedestal, embedded	2,365
Bridges	3 wood decks, embedded, 3' wide, 15' to 20' long	$ 4,500
Garden Centre	Administrative portable, community garden plots, flowers and landscaping	$150,000
Picnic Tables	3 embedded, pine seats and top, galvanized pipe frame	$ 1,254
Tennis Courts	Asphaltic concrete, rough and fine grading, fencing, nylon net and posts, colour finished surface, 3 court battery	$ 40,000

FACILITY	DESCRIPTION	COST
Lighting	Tennis court lighting for a 3 court battery includes service, distribution system, poles, bases, standards, fixtures, control switches, lamps	$ 9,900
Parking Lot	Pottruff Rd. near Queenston Rd. 100' x 75', up to 40 car capacity, crushed limestone paving, compacted subgrade	$ 2,916
Handrails	Steel, 1½" pipe, pavement mounted, welded joints, painted, 3' 6" high double rail for handicapped and aged; one side only	$ 3,500
*Culvert	Increasing size of existing culvert	
Gate	For path leading into Valley from parking lot, opened only for service vehicles, steel frame, lock, 6' length	$ 125
Litter Receptacles	Five 40-gallon barrels	$ 125
Clear Area	12 acres of brush, trees, weeds, garbage	$ 13,000
Trails	3000' long x 3' wide, 3" asphaltic concrete on 4" primed granular base, compacted subgrade	$ 9,693
Softball Field	Rough and fine grading, backstop, sodded, athletic benches, galvinized pipe frame, embedded, wood seat	$ 10,000
Basketball Court	Asphaltic concrete, includes rough and fine grading, posts, and plain surface	$ 10,000
Queenston Road to King Street 5.4.3		
Parking Lot	Pottruff Road S. at Queenston Rd., up to 40 cars, 100' x 75' area, crushed limestone paving, compacted 2" paving and compacted subgrade	$ 2,916
Lighting	Parking Lot: 30' steel poles	$ 4,870
	Bandshell: 15' plain steel poles	$ 4,500
	Both include service, distribution system, poles, bases, standards, lighting fixtures, control switches and lamps	

FACILITY	DESCRIPTION	COST
Playground	Two 4' x 4' platforms dimensional wood, 2 side walls or railings 6' high Suspension bridge: dimensional wood, galvinized chain railings, two 16' x 18' wide, stainless steel bed railings Horizontal ladder: 8'-10' long, galvinized pipe rings, dimensional wood uprights Tire swing: dimensional wood frame, auto tire seat Sandbox: 8' x 8' x 10"	$ 6,400
Trails	3000' long x 3" wide, 3" asphaltic concrete on 4" primed granular base, compacted subgrade	$ 9,963
Bandshell	Small scale, 10 rows of 5 benches, seating for 150-200 people	$100,000
Benches	5 backless pine or fir, steel pipe pedestal, embedded	$ 1,075
Garden Area	Includes community garden plots, rock structures, flowers, etc.	$ 75,000
Bocce Courts	Two of 75' x 8' wide, wood, fine sand compacted	$ 6,000
Bridges	2 wood deck, embedded, 3' wide, 15' to 20' length	$ 3,000
Parking Lot	Red Hill Bowl Area, up to 40 cars, 100' x 75' area, crushed limestone paving, compacted 2" paving and compacted subgrade	$ 2,916
Clear Area	9 acres of brush, trees, weeds, garbage, etc.	$ 12,000
Litter Receptacles	Five 40-gallon barrels	$ 125
*Culvert	Increase size of existing culvert	

FACILITY	DESCRIPTION	COST
King Street to T.H. & B. Tracks 5.4.4		
Litter Receptacles	Two 40-gallon barrels	$ 25
Soccer Field	Flat level land, with cut grass (already there), regulational goal posts, galvinized, steel pipe frame, net. (converted to outdoor rink in winter).	
Track	400 metre around soccer field, paved, asphaltic surface, 20' width.	
*Tunnel	Under the T.H. & B. Tracks	
T.H. & B. Tracks to Mount Albion Falls 5.4.5		
Bridges	3 wood decks, embedded, 3' wide, 15' to 20' length	$ 4,500
Stepped Stairs	Albright Road, exterior stairs, 68 steps, western cedar, 3' wide, 2" x 10" stringers, two 2" x 6" treads, railings 3' high 2" x 4", 2' x 4" posts.	
	Albion Falls Gorge, exterior stairs, (same as above) except with 96 steps.	$ 4,786
Trails	13,200' long x 3' wide, 3" asphaltic concrete on 4" primed granular base, compacted subgrade.	$ 43,500
Benches	5 backless, pine or fir, steel pipe pedestal, embedded (2 for picnic area, 3 for Gorge strip)	$ 1,075
Playground	Addition to the one on Glencastle Drive. 2 platforms 4' x 4', dimensional wood, 2 side wall or railings 4' high, dimensional wood suspension bridge, galvinized chain railings	$ 3,500
Bocce Courts	Next to Playground two of 75' x 10'	$ 6,000
Swimming Pool	Next to Rosedale Arena, Indoor 75' x 35'	$1,500,000
(Lower Butter Milk Falls Area)		
	3 backless benches	$ 645
	1 picnic table	$ 241

FACILITY	DESCRIPTION	COST
(Albion Side)		
	1 backless bench	$ 2251
Parking Lot	Up to 100 cars, 225' x 125', crushed limestone paving, compacted 2" paving and compacted subgrade	$ 11,000
Picnic Tables	14 embedded, 14 portable, pine seats and top galvinized pipe frame	$ 9,000
Pavilion	54' x 39' area, rectangular pitched roof, footings, slabs, excavation, paving, drainage etc.	$ 41,000
Nature Centre	includes portable of 364 sq. ft., 2 washrooms of 136 sq. ft.	$ 10,000
Lookout Deck	20' x 16', 2" x 6" decking, 4" x 8" beams, rim joists, 2' o.c., 4" x 4" posts, concrete footings, fir or pine	$ 2,288
	Western Cedar	$ 2,656
Clear Area	15 acres btush, trees, weeds, garbage	$ 20,000
Litter Receptacles	Eight 40-gallon barrels	$ 200

*Total cost for culverts and tunnel will be approximately between $2million and $2.5 million

TOTAL COST APPROXIMATELY BETWEEN $4 MILLION AND $4.5 MILLION

NB: Costs include labour, overhead and profit.

Estimates were taken from Kerr Associates, Cost Data for Landscape Construction, 1982. Minneapolis, Minnesota

Also estimates were taken from the Public Works Department, City of Hamilton. 1982.

RATIONALE OF RECREATION DEVELOPMENT 6.1

The city of Hamilton has always been termed an "ambitious" city, and it is hoped that the development of the Red Hill Creek Valley for recreation will serve to enhance this image.

By making Hamilton an attractive place to live as well as to work, the recreation complex sould help counterbalance the current population declines that the city is experiencing. Improvements to the outlying residential areas in the east end of the city will keep it attractive to residents and could offset the trend of movement back into the inner city. People would then not feel they have to live downtown to have access to social and cultural attractions if the valley were developed along these lines.

Since the east end of Hamilton is lacking in substatial greenspace areas, it only makes sense to preserve those areas still existing, like the Red Hill Creek Valley. The area would serve as a vital purpose of oxygen production and links other similar areas within the Niagara Escarpment, maintaining high biological diversity.

The Valley system contains several unique and environmentally sensitive areas which should be preserved. This can be achieved, while at the same time providing a cultural and recreational resource for people, through careful planning measures.

Housing Ontario reports that the Stoney Creek area of Hamilton-Wentworth is the only one growing at present. A major park system in the east end of the city would help serve this population's recreation demands. Monitoring the Housing Market shows that between 1977 and 1979 the apartment vacancy declined from 7.2 to 2.1 percent. In 1981 it was down to 1.5 percent, indicating that there are more people living in

apartments now. Thses people have little access to private greenspace, and would probably use the Valley for recreation if it were developed in an attractive way.

Recent planning trends have been to maintain urban vitality and attractiveness by improving existing services, rather than constructing new ones. Planning should focus on change not growth if population trends do not support growth.

Presently there is decreased income to be spent on recreation. Therefore, people need places and facilities close by where they do not necessarily need to take their cars and which is not too expensive. Natural wilderness experiences can occur at all levels. The Valley is a local resource and will probably be used by families on a daily basis, or even for only a few hours at a time. However, this does not mean it is not valuable as an area of nature education and appreciation.

A local resource like the Red Hill Creek Valley would be useful in drawing together members of different neighborhoods if it is developed properly. Through sharing of common facilities, a community feeling will develop. This will also foster good feelings in area residents about where they live and try to combat the unemployment, cost of living, and other apathy of young people which is so common today. If the Valley is used in the ways the Valley is being proposed, in cooperation with the education systems, it cannot help but to teach social and cultural values and provide residents with fond memories of the place where they lived and grew up. Who can say what manner of benefit this will have in keeping the east end of Hamilton a fine community that works well and in harmony.

This report and the following appendices will attempt to prove the viability of the Red Hill Creek Valley recreation development in bringing about the aforementioned changes and benefits.

IMPLEMENTATION AND ACCEPTANCE 6.2

This development plan for the Red Hill Creek Valley can be implemented in whole or in part. Alternatives as to specific facilities can be considered according to preference or future demands, although cleaning and clearing are high priorities at the moment. Communities are encouraged to participate in gaining the acceptance of this proposal in government and in the public eye.

The Save the Valley Committee can become involved in organizing fund raising drives and volunteer groups from neighborhood communities to assist in the clean up and development of the Valley by the public. A grant could be applied for the hiring of students or the unemployed to do the work.

Private sector businesses could be encouraged to contribute funds or facilities to the overall development, by erecting plaques in their honour and thanks of their generosity in contributing to something that will benefit the entire community. For example, they might be given benches or trees with their business name on it as is done presently done at Confederation Park in Hamilton.

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APPENDIX A

NEIGHBOURHOOD _____

ADDRESS _____

INTERVIEWER _____

START TIME _____

RED HILL CREEK LAND USE POTENTIAL

SOCIAL, CULTURAL, & RECREATIONAL RESEARCH GROUP

CALL	DATE	TIME	RESPONSE
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____

Hello! My name is _____ and I'm working for the Red Hill Creek Land Use Potential which is a government sponsored project.

We are conducting a survey on potential uses for the Red Hill Creek Valley. Your responses to these questions will be valuable in helping us to plan cultural and recreational uses for the Red Hill Valley in your neighbourhood as oppossed to the proposed Expressway.

It would be greatly appreciated if you could spare a few minutes of your time to help us.

THANK YOU VERY MUCH!

RED HILL CREEK LAND USE POTENTIAL

QUESTIONNAIRE

General Neighbourhood

1. Are you satsfied or dissatisfied with the following aspects of your neighbourhood?

	Satisfied	Dissatisfied
Schools	% 93.2	5.8
Open Space	84.5	15.0
Recreational Facilities	62.3	37.0
Bus Service	80.0	18.6
Quality of Housing	86.7	12.3
Neighbours	89.1	9.9
Safety for Children	73.4	26.1
Park Maintenance	78.0	20.8
Privacy	86.2	13.3
Parking	86.0	13.8
Access to your neighbourhood	89.4	9.9

Others: _____

_____

2. Overall, how satisfied are you with this neighbourhood as a place to live?

	Extremely Satisfied						Extremely Dissatisfied
	1	2	3	4	5	6	7
%	40.6	26.1	13.0	11.4	6.0	1.4	1.4

Present Use

3. How frequently do you and/or your family use the valley?

	Never	<1x/mnth	1x/mnth	<1x/wk	1x/wk	>1x/wk
In Summer	48.6	7.5	11.4	9.7	8.9	13.5
In Winter	59.2	8.2	8.2	8.2	7.2	8.2

4. What factors, if any, discourage you from using the valley?

_____

_____

5. What use(s) does your family make of the valley for recreation? If none, why?

_____

_____

6. How frequently does you and/or your family use the valley for each of the activities you have mentioned?

Activity	Never	<1x/mnth	1x/mnth	<1x/wk	1x/wk	>1x/wk
_____	___	___	___	___	___	___
_____	___	___	___	___	___	___
_____	___	___	___	___	___	___

7. What community group(s) do you belong to, if any, that use the Valley for recreation? (Social or Cultural uses)

_____

_____

8. What are your main leisure activities?

_____

_____

Future Use

9. How would you like to see the Valley developed in the future?

_____

_____

_____

10. What facilities would you like to see developed in your section of the Valley? (Use map).

_____

_____

11. How satisfied would you be with your neighbourhood if:

a. the valley was used for an expressway?

Extremely Satisfied 1 2 3 4 5 6 7 Extremely Dissatisfied

b. the valley was developed for recreational purposes.

Extremely Satisfied 1 2 3 4 5 6 7 Extremely Dissatisfied

RED HILL CREEK
SENSITIVITY AREAS

N

0 1 MILE

SCALE 1:25,000

12. On the following scales, rate the effects you think the recreational development of the Valley would have on your neighbourhood.

Greatly decrease traffic on your street	1	2	3	4	5	6	7	Greatly increase traffic on your street
Greatly increase personal safety	1	2	3	4	5	6	7	Greatly decrease personal safety
Greatly diminish noise levels	1	2	3	4	5	6	7	Greatly increase noise levels
Greatly enhance visual appearance	1	2	3	4	5	6	7	Greatly detract visual appearance
Greatly increase use of recreational area in your neighbourhood	1	2	3	4	5	6	7	Greatly decrease use of recreational area in your neighbourhood
Greatly complement neighbourhood quality and image	1	2	3	4	5	6	7	Greatly diminish neighbourhood quality and image
Greatly improve the image of the valley	1	2	3	4	5	6	7	Greatly detract the image of the valley
Greatly decrease crime	1	2	3	4	5	6	7	Greatly increase crime
Greatly improve use of bus service	1	2	3	4	5	6	7	Greatly decrease use of bus service
Greatly decrease pollution	1	2	3	4	5	6	7	Greatly increase pollution
Greatly increase animal and bird life	1	2	3	4	5	6	7	Greatly decrease animal and bird life
Greatly increase personal use of the Valley	1	2	3	4	5	6	7	Greatly decrease personal use of the valley
Greatly reduce personal use of automobile	1	2	3	4	5	6	7	Greatly increase personal use of automobile

13. If the following facilities/activities were available in the Valley, would you use them?

	No %	Yes %
Walking/Jogging Trails	8.7	90.1
Bicycling Trails	42.6	74.6
Nature Centre/Exhibits	18.6	80.0
Hiking	21.3	77.3
Picnicking/Rest Areas	15.5	83.8
Recreation Centre	19.3	78.8
Swimming Pool	22.5	75.6
Restaurant	41.5	55.8
Drive-In Theatre	61.8	36.0
Dirt-Bike Track	72.0	25.1
X-Country Skiing/Snowshoeing	40.3	56.6
Driving Range	46.9	50.0
Baseball/Soccer/Football Fields	22.9	75.1
Bandshell	27.5	69.1
Orienteering Trails	39.6	56.3
Exercise Trails	28.3	68.6
Lawn Bowling/Bocce	44.7	52.9
Garden Centre	23.2	74.2
Community Garden Centre	32.1	65.0
Photography	43.2	53.9
Kite Flying	49.5	48.1
Observation Tower	33.1	64.0
Marshland Bird Sanctuary	28.3	69.6
Conservation/Education Centre	17.1	79.0

Personal Information

14. SEX Female ____ Male ____

15. Age Group

Under 20 ____	7.0
20-30 ____	26.3
31-40 ____	25.6
41-50 ____	18.1
51-64 ____	12.3
65 and over ____	10.4

16. How many children do you have at home? _____

Ages: ____, ____, ____, ____, ____.

17. How long have you lived in your residence? _____

(32) # of Children

(33) # Preschool

(34) # Gradeschool

(35) # High School

(36) # Above High School

APPENDIX A

NEIGHBOURHOOD ASPECTS

		SATISFIED	DISSATISFIED
Access to Neighbourhood	Number	370	41
	Percentage	89.6	9.9
Bus Service		331	77
		80.9	18.8
Neighbours		369	41
		89.8	10.0
Open Space		350	62
		84.7	15.0
Park Maintenance		323	86
		78.8	21.0
Parking		356	57
		86.0	13.8
Quality of Housing		359	51
		87.3	12.4
Recreational Facilities		258	153
		62.61	37.1
Safety for Children		304	108
		73.6	26.2
Schools		386	24
		93.9	5.8

APPENDIX B

RANDOM SAMPLING

Formula

1. Calculate required "N" for each neighbourhood.
   (N = neighbourhood population)

   ie. Neighbourhood population x .01
   1920 x .01 = 19

2. Calculate sampling fraction for each neighbourhood.

   ie. Number of dwellings
   Required N

   $$\frac{598}{19} = 31$$

3. Select households by systematic random sampling according to required sampling fraction. (Ratio)

   ie. 1:31

4. Pick a random number for required sampling fraction and proceed to random sample.

   ie. "7" for 1:31
   For every 31 dwelling units the seventh one was chosen for interviewing.

APPENDIX B

RANDOM SAMPLING FOR EACH NEIGHBOURHOOD

Albion Falls	1. 215 x .01 = 2.15 2. 65/2.15 = 30.23 3. 1:30 4. 7
Corman	1. 4061 x .01 = 40.61 2. 1629/40.61 = 40.11 3. 1:40 4. 4
Gershome	1. 185 x .01 = 8.15 2. 220/8.15 = 26.99 3. 1:27 4. 7
Glenview East	1. 1106 x .01 = 11.06 2. 425/11.06 = 38.42 3. 1:38 4. 2
Glenview West	1. 2368 x .01 = 23.68 2. 924/23.68 = 39.02 3. 1:39 4. 1
Kentley	1. 4163 x .01 = 41.63 2. 1517/41.63 = 36.44 3. 1:36 4. 10
Lisgar	1. 2669 x .01 = 26.99 2. 763/26.69 = 28.59 3. 1:29 4. 13
McQuesten East	1. 1259 x .01 = 12.59 2. 391/12.59 = 31.05 3. 1:31 4. 23
McQuesten West	1. 6359 x .01 = 63.59 2. 2269/63.59 = 35.68 3. 1:36 4. 4

APPENDIX B

RANDOM SAMPLING FOR EACH NEIGHBOURHOOD (cont'd)

Parkview East	1. 768 x .01 = 7.68 2. 243/7.68 = 31.64 3. 1:32 4. 17
Parkview West	1. 1905 x .01 = 19.05 2. 593/19.05 = 31.12 3. 1:31 4. 13
Red Hill	1. 4250 x .01 = 42.50 2. 1445/42.50 = 34 3. 1:34 4. 28
Rosedale	1. 4595 x .01≈45.95 2. 1565/45.95 = 34.05 3. 1:34 4. 14
Trenholme	1. 575 x .01 = 5.75 2. 166/5.75 = 28.86 3. 1:29 4. 15
Vincent	1. 8469 x .01 = 84.69 2. 2467/84.69 = 29.12 3. 1:29 4. 15

RANDOM SAMPLE RESULTS

NEIGHBOURHOOD	TOTAL	ORIGINAL	REPLACE-MENT	REPLACEMENT ANSWERED	REFUSALS	*LANG.	OLD/ ILL	OTHERS
Albion Falls	3	3	0	0	0	-	-	-
Corman	42	32	10	9	1	-	1	-
Gershome	9	8	1	0	1	-	-	1
Glenview East	11	7	4	2	2	-	-	2
Glenview West	23	17	6	4	2	1	1	-
Kentley	43	34	9	7	2	1	-	1
Lisgar	22	20	2	0	2	-	-	2
McQuesten East	12	8	4	3	1	-	-	1
McQuesten West	63	28	35	29	6	1	-	5
Parkview East	8	5	3	2	1	-	-	1
Parkview West	18	14	4	3	1	-	-	1
Red Hill	40	33	7	7	0	-	-	-
Rosedale	46	37	9	8	1	-	1	-
Trenholme	7	7	0	0	0	-	-	-
Vincent	89	78	11	9	2	-	-	2
TOTALS	436	331	105	83	22	3	3	16
	100%	77%	(23%	= 18%	+ 5%)			

Accuracy Rate

77% original accuracy rate
95% accuracy rate with replacements

APPENDIX C

FACTORS--Codes 20-25

01 Animals

02 Disabled/Age

03 Lack of Police Control

04 No Access

05 No Interest

06 No Kids

07 No Lighting

08 No Time

09 Noisy

10 None

11 Not Kpet Well - Clean Up

12 Pollution - Dirty, Sewer Smell, Garbage

13 Senior Citizens

14 Unaware - Not Enough Information

15 Undeveloped

16 Unsafe

17 Want an Expressway

18 Mosquitoes

APPENDIX C

USES--Codes 26-31

01 Baseball
02 Bike Ride
03 Dirtbikes
04 Fishing
05 Football
06 Golf
07 Hiking
08 Hockey
09 Jogging
10 Kite Flying
11 Meeting Friends
12 Nature Study
13 None
14 Picnics
15 Playing with Kids
16 School Uses
17 Skating
18 Skidoo
19 Skiing
20 Soccer
21 Swimming
22 T-Ball
23 Tennis
24 Tobogganing
25 Walking
26 Watching Games
27 Arena Uses

APPENDIX C

WHY--Codes 32-37

01 Children Grown Up

02 Dirty

03 Drunks

04 Just Moved In

05 Lack of Development

06 No Bus Service

07 No Facilities for Elderly/Disabled

08 No Interest

09 No Time

10 Retired

11 Unsafe

APPENDIX C

COMMUNITY GROUPS--Code 41

1 Glendale Golf Course

2 Glendale High School

3 King's Forest Golf Club

4 King's Forest Tennis Club

5 None

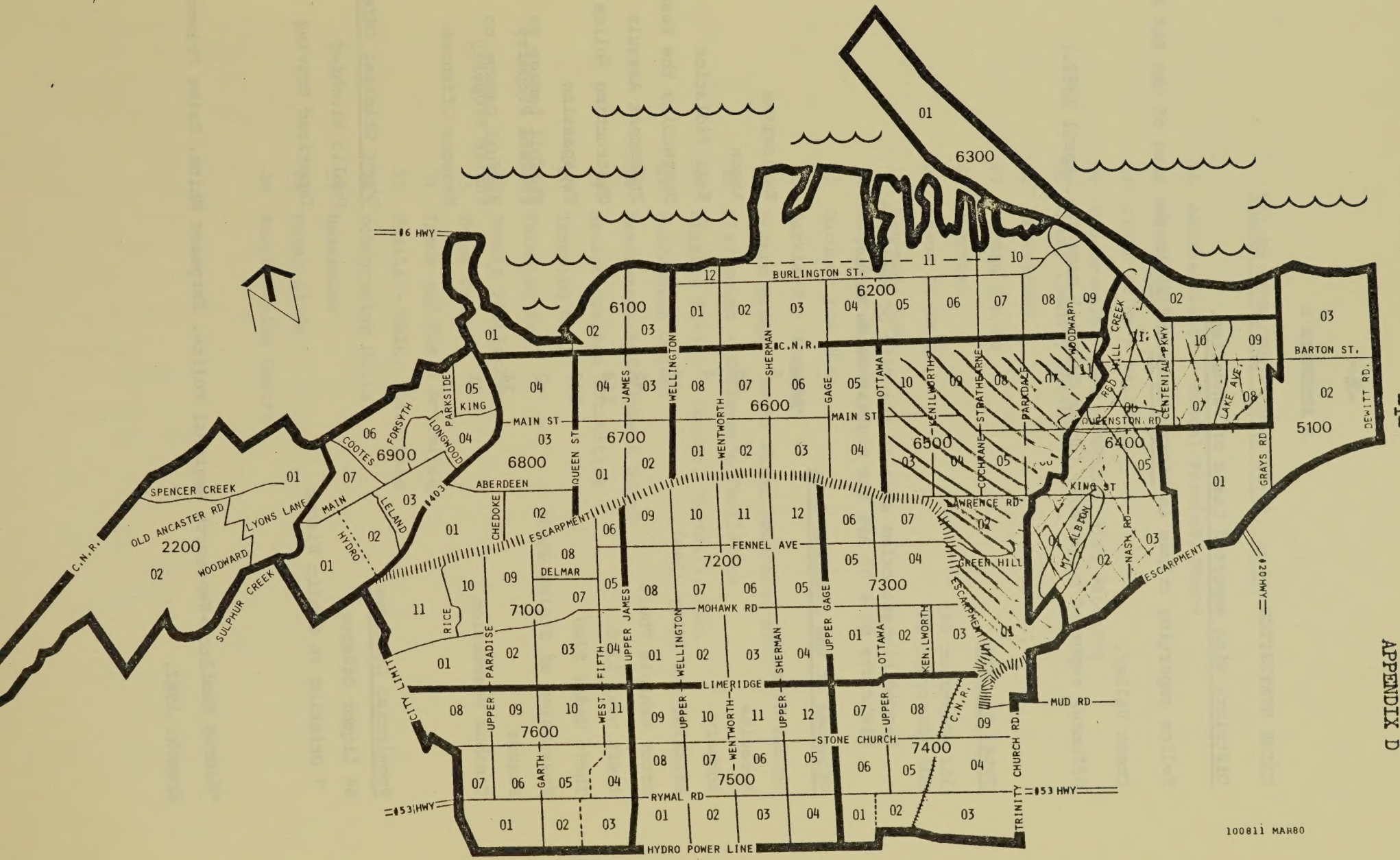
6 Rosedale Community Council

7 Red Hill Community Council

APPENDIX C

LEISURE ACTIVITIES--Codes 42-47

01 Badminton
02 Baseball
03 Bicycling
04 Biking (Motor)
05 Bingo
06 Bowling
07 Camping
08 Conservationalist
09 Crafts
10 Dancing
11 Fishing
12 Fitness Centre
13 Football
14 Gardening
15 Going Out (eg. shopping, stage play etc.)
16 Golf
17 Hiking
18 Hockey
19 Home (eg. knitting, sewing, painting, etc.)
20 Hunting
21 Jogging
22 Photography
23 Picnicking
24 Ping Pong
25 Play in the Park with Kids
26 Skating
27 Skiidoo
28 Skiing
29 Soccer
30 Swimming
31 Tennis
32 Tobogganning
33 Walking
34 X-Country Skiing
35 Travel/Vacation



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POLICE REPORTING DISTRICTS: OFFENCES REPORTED BY PERSONS. 1982 CRIMINAL CODE

APPENDIX D

CRIME STATISTICS

Districts with Reported Cases of Vandalism.

Police reporting crimes in Districts 64 and 65 in the area of the Red Hill Creek Valley.

Offences reported by persons (under Criminal Code Jan.-April 1982.)

Total to Date

352 (District 64)
501 (District 65)

Second highest crime area in the City of Hamilton.
Districts 66 & 67 are the highest crime areas.

Offences of the Criminal Code

	Total		Total
Sexual Offences	5	Explosives	6
Assaults	65	Arson	1
Robbery	4	Bail Violation	4
Breaking and Entry (Res)	97	Disturbing the Peace	2
Motor Vehicle Theft	45	Indecent Assault	4
Theft over $200	124	Obstructing Police	7
Theft under $200	217	Trespassing	1
Possession of Stolen Goods	2	Wilfull Damage to Private Property	101
Frauds	34	Wilfull Damage to Public Property	9
Canibus Possession	21	Weapons Offences	6

Provincial Statuses	Other Criminal Offences	
64 Liquor Offences	Public Mischief	
7 Drinking in Public Places	Imparired Driving	35

*Source Hamilton-Wentworth Regional Police. Sargeant White, Crime Prevention Branch. 1982.

APPENDIX E

VALLEY DEVELOPED--Codes 48-53, 54-59

01 Accessibility - Roads, Parking, Steps
02 Basketball Courts
03 Clean It Up - Maintain
04 Conservation Area - Nature, Bird Watching
05 Cross Country Skiing
06 Expressway
07 Garden Centre
08 Hospital
09 Leave It As Is
10 Man-Made Lake
11 Mini Putt Course
12 Outdoor Ice Rink
13 Parkland - Benches
14 Picnic Areas - Rest, Water Fountain, etc.
15 Playground - Children's Facilities
16 Playing Fields - Soccer, Football, etc.
17 Recreation Centre
18 Restaurant/Refreshment Stand
19 Senior Citizen Activities
20 Shopping Mall
21 Swimming Pool
22 Tennis Facilities
23 Theme Park
24 Track and Field Activities
25 Trails - Walk, Hike, Bike
26 Tobogganing Hills
27 Washrooms
28 Water Slide
29 Zoo/Wildlife Centre

CROSSTABS FOR NEIGHBORHOODS OF RED HILL CREEK

FILE NONAME (CREATION DATE = 82/08/19.)

82/08/19. 12.35.14. PAGE 52

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOP1 * * * * * * * * * * * * * * * * * *

CROSSTABS FOR NEIGHBORHOODS OF RED HILL CREEK 82/08/19. 12.35.14. PAGE 53

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *

NGHBHOOD BY DEVELOP1 PAGE 2 OF 6

DEVELOP1

NGHBHOOD / COUNT / ROW PCT / COL PCT / TOT PCT	13.	14.	15.	16.	17.	19.	21.	22.	23.	25.	ROW TOTAL
1. ALBION FALLS	2 66.7 2.2 .6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	3 .9
2. CORMAN	3 8.3 3.3 .9	0 0 0 0	0 0 0 0	3 8.3 42.9 .9	1 2.9 4.8 .3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	36 10.3
3. GERSHOME	1 12.5 1.1 .3	0 0 0 0	0 0 0 0	1 12.5 14.3 .3	0 0 0 0	0 0 0 0	1 12.5 25.0 .3	1 12.5 100.0 .3	0 0 0 0	0 0 0 0	8 2.3
4. GLENVIEW EAST	2 28.6 2.2 .6	0 0 0 0	1 14.3 5.9 .3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	7 2.0
5. GLENVIEW WEST	9 42.9 9.9 2.6	0 0 0 0	0 0 0 0	1 4.8 14.3 .3	3 14.3 14.3 .9	1 4.8 50.0 .3	0 0 0 0	0 0 0 0	0 0 0 0	3 14.3 10.7 .9	21 6.0
6. KENTLEY	17 42.5 18.7 4.9	0 0 0 0	1 2.5 5.9 .3	1 2.5 14.3 .3	4 10.0 19.0 1.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	3 7.5 10.7 .9	43 11.5
7. LISGAR	1 5.6 1.1 .3	2 11.1 33.3 .6	3 16.7 17.6 .9	0 0 0 0	1 5.6 4.8 .3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 5.6 3.6 .3	18 5.2
8. MCQUESTEN EAST	6 75.0 6.6 1.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	8 2.3
COLUMN TOTAL	91 26.1	6 1.7	17 4.9	7 2.0	21 6.0	2 .6	4 1.1	1 .3	1 .3	28 8.0	348 100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOP1 * PAGE 3 OF 5

NGHBHOOD	DEVELOP1 26.	DEVELOP1 28.	DEVELOP1 29.	ROW TOTAL
1. ALBION FALLS	0	0	0	3
	0	0	0	.9
	0	0	0	
	0	0	0	
2. CORMAN	0	1	0	36
	0	2.8	0	10.3
	0	100.0	0	
	0	.3	0	
3. GERSHOME	0	0	0	8
	0	0	0	2.3
	0	0	0	
	0	0	0	
4. GLENVIEW EAST	0	0	0	7
	0	0	0	2.0
	0	0	0	
	0	0	0	
5. GLENVIEW WEST	0	0	0	21
	0	0	0	6.0
	0	0	0	
	0	0	0	
6. KENTLEY	0	0	0	40
	0	0	0	11.5
	0	0	0	
	0	0	0	
7. LISGAR	0	0	0	18
	0	0	0	5.2
	0	0	0	
	0	0	0	
8. MCQUESTEN EAST	0	0	0	8
	0	0	0	2.3
	0	0	0	
	0	0	0	
COLUMN TOTAL	2 .6	1 .3	2 .6	348 100.0

(CONTINUED)

CROSSTABS FOR NEIGHBORHOODS OF RED HILL CREEK 82/08/19. 12.35.14. PAGE 55

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *

NGHBHOOD BY DEVELOP1

* PAGE 4 OF 6

DEVELOP1

NGHBHOOD / COUNT / ROW PCT / COL PCT / TOT PCT	1.	3.	4.	5.	6.	7.	9.	10.	11.	12.	ROW TOTAL
9. MCQUESTEN WEST	0	2	1	0	4	0	9	1	0	0	44
	0	4.5	2.3	0	9.1	0	20.5	2.3	0	0	12.6
	0	4.3	20.0	0	14.8	0	11.7	100.0	0	0	
	0	.6	.3	0	1.1	0	2.6	.3	0	0	
10. PARKVIEW EAST	0	0	0	0	2	1	0	0	0	0	5
	0	0	0	0	33.3	16.7	0	0	0	0	1.7
	0	0	0	0	7.4	100.0	0	0	0	0	
	0	0	0	0	.6	.3	0	0	0	0	
11. PARKVIEW WEST	0	1	1	0	0	0	2	0	0	0	14
	0	7.1	7.1	0	0	0	14.3	0	0	0	4.0
	0	2.2	20.0	0	0	0	2.6	0	0	0	
	0	.3	.3	0	0	0	.6	0	0	0	
12. RED HILL	1	5	0	0	3	0	10	0	0	0	40
	2.5	12.5	0	0	7.5	0	25.0	0	0	0	11.5
	20.0	10.9	0	0	11.1	0	13.0	0	0	0	
	.3	1.4	0	0	.9	0	2.9	0	0	0	
13. ROSEDALE	1	7	2	0	3	0	10	0	1	0	43
	2.3	16.3	4.7	0	7.0	0	23.3	0	2.3	0	12.4
	20.0	15.2	40.0	0	11.1	0	13.0	0	100.0	0	
	.3	2.0	.6	0	.9	0	2.9	0	.3	0	
14. TRENHOLME	0	1	0	0	0	0	2	0	0	0	7
	0	14.3	0	0	0	0	28.6	0	0	0	2.0
	0	2.2	0	0	0	0	2.6	0	0	0	
	0	.3	0	0	0	0	.6	0	0	0	
15. VINCENT	0	4	1	1	5	0	16	0	0	1	53
	0	7.5	1.9	1.9	9.4	0	30.2	0	0	1.9	15.2
	0	8.7	20.0	100.0	18.5	0	20.8	0	0	100.0	
	0	1.1	.3	.3	1.4	0	4.6	0	0	.3	
COLUMN TOTAL	5	46	5	1	27	1	77	1	1	1	348
	1.4	13.2	1.4	.3	7.8	.3	22.1	.3	.3	.3	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOP1 * * * * * * * * * * * * * * * * * * *

) CROSSTABS FOR NEIGHBORHOODS OF RED HILL CREEK 82/08/19. 12.35.14. PAGE 57

FILE NONAME (CREATION DATE = 82/08/19.)

) * C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOP1 * PAGE 6 OF 6

)

NGHBHOOD	DEVELOP1	26.	28.	29.	ROW TOTAL
9. MCQUESTEN WEST	COUNT	1	0	1	44
	ROW PCT	2.3	0	2.3	12.6
	COL PCT	50.0	0	50.0	
	TOT PCT	.3	0	.3	
10. PARKVIEW EAST	COUNT	0	0	0	6
	ROW PCT	0	0	0	1.7
	COL PCT	0	0	0	
	TOT PCT	0	0	0	
11. PARKVIEW WEST	COUNT	0	0	1	14
	ROW PCT	0	0	7.1	4.0
	COL PCT	0	0	50.0	
	TOT PCT	0	0	.3	
12. RED HILL	COUNT	0	0	0	40
	ROW PCT	0	0	0	11.5
	COL PCT	0	0	0	
	TOT PCT	0	0	0	
13. ROSEDALE	COUNT	0	0	0	43
	ROW PCT	0	0	0	12.4
	COL PCT	0	0	0	
	TOT PCT	0	0	0	
14. TRENHOLME	COUNT	0	0	0	7
	ROW PCT	0	0	0	2.0
	COL PCT	0	0	0	
	TOT PCT	0	0	0	
15. VINCENT	COUNT	1	0	0	53
	ROW PCT	1.9	0	0	15.2
	COL PCT	50.0	0	0	
	TOT PCT	.3	0	0	
COLUMN TOTAL		2	1	2	348
		.6	.3	.6	100.0

RAW CHI SQUARE = 403.41112 WITH 308 DEGREES OF FREEDOM. SIGNIFICANCE = .0002

NUMBER OF MISSING OBSERVATIONS = 66

)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOP2
* * * * * * * * * * * * * * * * * * * \

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOP2 *

NGHBHOOD	DEVELOP2	15.	16.	17.	18.	19.	20.	21.	23.	24.	25.	ROW TOTAL
1. ALBION FALLS	COUNT	0	0	0	0	0	0	0	0	0	1	3
	ROW PCT	0	0	0	0	0	0	0	0	0	33.3	1.8
	COL PCT	0	0	0	0	0	0	0	0	0	9.1	
	TOT PCT	0	0	0	0	0	0	0	0	0	.6	
2. CORMAN	COUNT	1	0	1	0	0	0	1	0	1	0	13
	ROW PCT	7.7	0	7.7	0	0	0	7.7	0	7.7	0	7.7
	COL PCT	5.0	0	6.3	0	0	0	7.1	0	50.0	0	
	TOT PCT	.6	0	.6	0	0	0	.6	0	.6	0	
3. GERSHOME	COUNT	1	0	2	0	0	0	1	0	1	0	5
	ROW PCT	20.0	0	40.0	0	0	0	20.0	0	20.0	0	3.0
	COL PCT	5.0	0	12.5	0	0	0	7.1	0	50.0	0	
	TOT PCT	.6	0	1.2	0	0	0	.6	0	.6	0	
4. GLENVIEW EAST	COUNT	0	0	0	0	0	0	0	0	0	0	1
	ROW PCT	0	0	0	0	0	0	0	0	0	0	.6
	COL PCT	0	0	0	0	0	0	0	0	0	0	
	TOT PCT	0	0	0	0	0	0	0	0	0	0	
5. GLENVIEW WEST	COUNT	3	0	2	3	1	0	1	0	0	0	15
	ROW PCT	20.0	0	13.3	20.0	6.7	0	6.7	0	0	0	8.9
	COL PCT	15.0	0	12.5	100.0	100.0	0	7.1	0	0	0	
	TOT PCT	1.8	0	1.2	1.8	.6	0	.6	0	0	0	
6. KENTLEY	COUNT	3	2	1	0	0	0	1	0	0	1	23
	ROW PCT	13.0	8.7	4.3	0	0	0	4.3	0	0	4.3	13.6
	COL PCT	15.0	22.2	6.3	0	0	0	7.1	0	0	9.1	
	TOT PCT	1.8	1.2	.6	0	0	0	.6	0	0	.6	
7. LISGAR	COUNT	0	0	2	0	0	0	1	0	0	0	9
	ROW PCT	0	0	22.2	0	0	0	11.1	0	0	0	5.3
	COL PCT	0	0	12.5	0	0	0	7.1	0	0	0	
	TOT PCT	0	0	1.2	0	0	0	.6	0	0	0	
8. MCQUESTEN EAST	COUNT	1	1	0	0	0	0	0	0	0	0	3
	ROW PCT	33.3	33.3	0	0	0	0	0	0	0	0	1.8
	COL PCT	5.0	11.1	0	0	0	0	0	0	0	0	
	TOT PCT	.6	.6	0	0	0	0	0	0	0	0	
COLUMN TOTAL		20	9	16	3	1	1	14	1	2	11	169
		11.8	5.3	9.5	1.8	.6	.6	8.3	.6	1.2	6.5	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOP2
* PAGE 3 OF 5

NGHBHOOD	DEVELOP2 26.	DEVELOP2 27.	DEVELOP2 28.	DEVELOP2 29.	ROW TOTAL
1. ALBION FALLS	0	0	0	0	3
	0	0	0	0	1.8
	0	0	0	0	
	0	0	0	0	
2. CORMAN	0	0	0	0	13
	0	0	0	0	7.7
	0	0	0	0	
	0	0	0	0	
3. GERSHOME	0	0	0	0	5
	0	0	0	0	3.0
	0	0	0	0	
	0	0	0	0	
4. GLENVIEW EAST	0	0	0	0	1
	0	0	0	0	.6
	0	0	0	0	
	0	0	0	0	
5. GLENVIEW WEST	0	0	0	0	15
	0	0	0	0	8.9
	0	0	0	0	
	0	0	0	0	
6. KENTLEY	0	0	0	0	23
	0	0	0	0	13.6
	0	0	0	0	
	0	0	0	0	
7. LISGAR	0	0	0	0	9
	0	0	0	0	5.3
	0	0	0	0	
	0	0	0	0	
8. MCQUESTEN EAST	0	0	0	0	3
	0	0	0	0	1.8
	0	0	0	0	
	0	0	0	0	
COLUMN TOTAL	1	1	1	1	169
	.6	.6	.6	.6	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOP2
* PAGE 4 OF 5

NGHBHOOD / DEVELOP2	1.	3.	4.	5.	6.	7.	9.	10.	13.	14.	ROW TOTAL
9. MCQUESTEN WEST	0	2	2	0	0	1	0	0	5	1	18
	0	11.1	11.1	0	0	5.6	0	0	27.8	5.6	10.7
	0	9.5	66.7	0	0	14.3	0	0	20.0	7.1	
	0	1.2	1.2	0	0	.6	0	0	3.0	.6	
10. PARKVIEW EAST	1	1	0	0	0	0	0	0	0	0	3
	33.3	33.3	0	0	0	0	0	0	0	0	1.8
	11.1	4.8	0	0	0	0	0	0	0	0	
	.6	.6	0	0	0	0	0	0	0	0	
11. PARKVIEW WEST	0	0	0	0	0	0	0	0	2	1	9
	0	0	0	0	0	0	0	0	22.2	11.1	5.3
	0	0	0	0	0	0	0	0	8.0	7.1	
	0	0	0	0	0	0	0	0	1.2	.6	
12. RED HILL	2	0	0	0	0	2	0	0	4	2	24
	8.3	0	0	0	0	8.3	0	0	16.7	8.3	14.2
	22.2	0	0	0	0	28.6	0	0	16.0	14.3	
	1.2	0	0	0	0	1.2	0	0	2.4	1.2	
13. ROSEDALE	0	5	1	1	0	0	0	0	1	1	21
	0	23.8	4.8	4.8	0	0	0	0	4.8	4.8	12.4
	0	23.8	33.3	100.0	0	0	0	0	4.0	7.1	
	0	3.0	.6	.6	0	0	0	0	.6	.6	
14. TRENHOLME	1	0	0	0	1	0	0	0	0	0	3
	33.3	0	0	0	33.3	0	0	0	0	0	1.8
	11.1	0	0	0	33.3	0	0	0	0	0	
	.6	0	0	0	.6	0	0	0	0	0	
15. VINCENT	1	4	0	0	0	1	0	0	2	3	19
	5.3	21.1	0	0	0	5.3	0	0	10.5	15.8	11.2
	11.1	19.0	0	0	0	14.3	0	0	8.0	21.4	
	.6	2.4	0	0	0	.6	0	0	1.2	1.8	
COLUMN TOTAL	9	21	3	1	3	7	3	1	25	14	169
	5.3	12.4	1.8	.6	1.8	4.1	1.8	.6	14.8	8.3	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOP2 * * * * * * * * * * * * * * * * * *

CROSSTABS FOR NEIGHBORHOODS OF RED HILL CREEK 82/08/19. 12.35.14. PAGE 73

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *

NGHBHOOD BY DEVELOP2

* * * * * * * * * * * * * * * * * * * \

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
NGHBHOOD BY DEVELOP3
* * * * * * * * * * * * * * * * * * \

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
NGHBHOOD BY DEVELOP3
* PAGE 2 OF 4

NGHBHOOD	DEVELOP3 16.	17.	18.	21.	22.	25.	26.	ROW TOTAL
1. ALBION FALLS	1	1	0	0	0	0	0	3
	33.3	33.3	0	0	0	0	0	4.6
	14.3	25.0	0	0	0	0	0	
	1.5	1.5	0	0	0	0	0	
2. CORMAN	0	0	0	1	0	0	0	4
	0	0	0	25.0	0	0	0	6.2
	0	0	0	7.7	0	0	0	
	0	0	0	1.5	0	0	0	
3. GERSHOME	1	0	0	0	0	1	0	2
	50.0	0	0	0	0	50.0	0	3.1
	14.3	0	0	0	0	14.3	0	
	1.5	0	0	0	0	1.5	0	
4. GLENVIEW EAST	0	0	0	0	0	0	0	1
	0	0	0	0	0	0	0	1.5
	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	
5. GLENVIEW WEST	0	1	1	1	0	0	0	5
	0	20.0	20.0	20.0	0	0	0	7.7
	0	25.0	50.0	7.7	0	0	0	
	0	1.5	1.5	1.5	0	0	0	
6. KENTLEY	1	0	0	3	0	1	0	8
	12.5	0	0	37.5	0	12.5	0	12.3
	14.3	0	0	23.1	0	14.3	0	
	1.5	0	0	4.6	0	1.5	0	
7. LISGAR	0	0	0	0	0	0	0	3
	0	0	0	0	0	0	0	4.6
	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	
9. MCQUESTEN WEST	0	0	0	4	0	1	1	8
	0	0	0	50.0	0	12.5	12.5	12.3
	0	0	0	30.8	0	14.3	100.0	
	0	0	0	6.2	0	1.5	1.5	
COLUMN TOTAL	7	4	2	13	1	7	1	65
	10.8	6.2	3.1	20.0	1.5	10.8	1.5	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
NGHBHOOD BY DEVELOP3
* PAGE 3 OF 4

NGHBHOOD	DEVELOP3	1.	3.	4.	6.	7.	9.	12.	13.	14.	15.	ROW TOTAL
10. PARKVIEW EAST	COUNT	0	2	0	0	0	0	0	0	0	0	2
	ROW PCT	0	100.0	0	0	0	0	0	0	0	0	3.1
	COL PCT	0	40.0	0	0	0	0	0	0	0	0	
	TOT PCT	0	3.1	0	0	0	0	0	0	0	0	
11. PARKVIEW WEST	COUNT	0	1	0	0	0	0	0	0	0	0	3
	ROW PCT	0	33.3	0	0	0	0	0	0	0	0	4.6
	COL PCT	0	20.0	0	0	0	0	0	0	0	0	
	TOT PCT	0	1.5	0	0	0	0	0	0	0	0	
12. RED HILL	COUNT	3	1	0	1	0	0	0	0	0	1	13
	ROW PCT	23.1	7.7	0	7.7	0	0	0	0	0	7.7	20.0
	COL PCT	50.0	20.0	0	100.0	0	0	0	0	0	14.3	
	TOT PCT	4.6	1.5	0	1.5	0	0	0	0	0	1.5	
13. ROSEDALE	COUNT	0	0	0	0	0	1	0	0	0	1	2
	ROW PCT	0	0	0	0	0	50.0	0	0	0	50.0	3.1
	COL PCT	0	0	0	0	0	100.0	0	0	0	14.3	
	TOT PCT	0	0	0	0	0	1.5	0	0	0	1.5	
14. TRENHOLME	COUNT	0	0	0	0	0	0	0	0	0	0	1
	ROW PCT	0	0	0	0	0	0	0	0	0	0	1.5
	COL PCT	0	0	0	0	0	0	0	0	0	0	
	TOT PCT	0	0	0	0	0	0	0	0	0	0	
15. VINCENT	COUNT	0	1	0	0	1	0	0	1	0	1	10
	ROW PCT	0	10.0	0	0	10.0	0	0	10.0	0	10.0	15.4
	COL PCT	0	20.0	0	0	100.0	0	0	25.0	0	14.3	
	TOT PCT	0	1.5	0	0	1.5	0	0	1.5	0	1.5	
COLUMN TOTAL		6	5	1	1	1	1	2	4	2	7	65
		9.2	7.7	1.5	1.5	1.5	1.5	3.1	6.2	3.1	10.8	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGH8HOOD BY DEVELOP3
* PAGE 4 OF 4

NGH8HOOD	DEVELOP3 16.	17.	18.	21.	22.	25.	26.	ROW TOTAL
10. PARKVIEW EAST	0	0	0	0	0	0	0	2
	0	0	0	0	0	0	0	3.1
	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	
11. PARKVIEW WEST	1	0	0	1	0	0	0	3
	33.3	0	0	33.3	0	0	0	4.6
	14.3	0	0	7.7	0	0	0	
	1.5	0	0	1.5	0	0	0	
12. RED HILL	0	2	0	2	1	2	0	13
	0	15.4	0	15.4	7.7	15.4	0	20.0
	0	50.0	0	15.4	100.0	28.6	0	
	0	3.1	0	3.1	1.5	3.1	0	
13. ROSEDALE	0	0	0	0	0	0	0	2
	0	0	0	0	0	0	0	3.1
	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	
14. TRENHOLME	0	0	1	0	0	0	0	1
	0	0	100.0	0	0	0	0	1.5
	0	0	50.0	0	0	0	0	
	0	0	1.5	0	0	0	0	
15. VINCENT	3	0	0	1	0	2	0	10
	30.0	0	0	10.0	0	20.0	0	15.4
	42.9	0	0	7.7	0	28.6	0	
	4.6	0	0	1.5	0	3.1	0	
COLUMN TOTAL	7	4	2	13	1	7	1	65
	10.8	6.2	3.1	20.0	1.5	10.8	1.5	100.0

RAW CHI SQUARE = 234.28588 WITH 208 DEGREES OF FREEDOM. SIGNIFICANCE = .1012

NUMBER OF MISSING OBSERVATIONS = 349

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
NGHBHOOD BY DEVELOP4
* PAGE 1 OF 4

NGHBHOOD / DEVELOP4 (COUNT / ROW PCT / COL PCT / TOT PCT)	1.	3.	4.	7.	8.	9.	12.	13.	14.	15.	ROW TOTAL
1. ALBION FALLS	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 50.0 100.0 .9	0 0 0 0	1 50.0 12.5 .9	0 0 0 0	2 1.9
2. CORMAN	1 10.0 25.0 .9	0 0 0 0	0 0 0 0	0 0 0 0	4 40.0 44.4 3.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 10.0 11.1 .9	10 9.4
4. GLENVIEW EAST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	2 50.0 25.0 1.9	0 0 0 0	4 3.8
5. GLENVIEW WEST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .9
6. KENTLEY	1 9.1 25.0 .9	1 9.1 25.0 .9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 9.1 20.0 .9	0 0 0 0	2 18.2 22.2 1.9	11 10.4
7. LISGAR	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .9
8. MCQUESTEN EAST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 14.3 50.0 .9	0 0 0 0	0 0 0 0	0 0 0 0	1 14.3 11.1 .9	7 6.6
9. MCQUESTEN WEST	0 0 0 0	1 4.2 25.0 .9	1 4.2 33.3 .9	1 4.2 100.0 .9	1 4.2 11.1 .9	0 0 0 0	0 0 0 0	3 12.5 60.0 2.8	3 12.5 37.5 2.8	4 16.7 44.4 3.8	24 22.6
COLUMN TOTAL	4 3.8	4 3.8	3 2.8	1 .9	9 8.5	2 1.9	1 .9	5 4.7	8 7.5	9 8.5	106 100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOP4
* PAGE 2 OF 4

DEVELOP4

NGHBHOOD / COUNT, ROW PCT, COL PCT, TOT PCT	16.	17.	21.	22.	25.	26.	27.	29.	ROW TOTAL
1. ALBION FALLS	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	2 1.9
2. CORMAN	0 0 0 0	0 0 0 0	4 40.0 15.4 3.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	10 9.4
4. GLENVIEW EAST	1 25.0 12.5 .9	0 0 0 0	1 25.0 3.8 .9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	4 3.8
5. GLENVIEW WEST	0 0 0 0	0 0 0 0	1 100.0 3.8 .9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .9
6. KENTLEY	0 0 0 0	2 18.2 28.6 1.9	2 18.2 7.7 1.9	1 9.1 25.0 .9	1 9.1 9.1 .9	0 0 0 0	0 0 0 0	0 0 0 0	11 10.4
7. LISGAR	0 0 0 0	1 100.0 14.3 .9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .9
8. MCQUESTEN EAST	2 28.6 25.0 1.9	1 14.3 14.3 .9	1 14.3 3.8 .9	1 14.3 25.0 .9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	7 6.6
9. MCQUESTEN WEST	1 4.2 12.5 .9	1 4.2 14.3 .9	2 8.3 7.7 1.9	1 4.2 25.0 .9	4 16.7 36.4 3.8	0 0 0 0	1 4.2 50.0 .9	0 0 0 0	24 22.6
COLUMN TOTAL	8 7.5	7 6.6	26 24.5	4 3.8	11 10.4	1 .9	2 1.9	1 .9	106 100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOPS
* PAGE 3 OF 4

NGHBHOOD	DEVELOPS 1.	3.	4.	7.	8.	9.	12.	13.	14.	15.	ROW TOTAL
10. PARKVIEW EAST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 50.0 20.0 .9	0 0 0 0	0 0 0 0	2 1.9
11. PARKVIEW WEST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	3 2.8
12. RED HILL	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 16.7 50.0 .9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	6 5.7
13. ROSEDALE	1 5.3 25.0 .9	1 5.3 25.0 .9	0 0 0 0	0 0 0 0	4 21.1 44.4 3.8	0 0 0 0	0 0 0 0	0 0 0 0	1 5.3 12.5 .9	0 0 0 0	19 17.9
14. TRENHOLME	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 .9
15. VINCENT	1 6.7 25.0 .9	1 6.7 25.0 .9	2 13.3 66.7 1.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 6.7 12.5 .9	1 6.7 11.1 .9	15 14.2
COLUMN TOTAL	4 3.8	4 3.8	3 2.8	1 .9	9 8.5	2 1.9	1 .9	5 4.7	8 7.5	9 8.5	106 100.0

(CONTINUED)

CROSSTABS FOR NEIGHBORHOODS OF RED HILL CREEK 82/08/19. 12.35.14. PAGE 31

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
NGHBHOOD BY DEVELOP4
* PAGE 4 OF 4

NGHBHOOD / DEVELOP4	16.	17.	21.	22.	25.	26.	27.	29.	ROW TOTAL
10. PARKVIEW EAST	0	0	0	0	1	0	0	0	2
	0	0	0	0	50.0	0	0	0	1.9
	0	0	0	0	9.1	0	0	0	
	0	0	0	0	.9	0	0	0	
11. PARKVIEW WEST	0	0	1	0	1	1	0	0	3
	0	0	33.3	0	33.3	33.3	0	0	2.8
	0	0	3.8	0	9.1	100.0	0	0	
	0	0	.9	0	.9	.9	0	0	
12. RED HILL	1	2	2	0	0	0	0	0	5
	16.7	33.3	33.3	0	0	0	0	0	5.7
	12.5	28.6	7.7	0	0	0	0	0	
	.9	1.9	1.9	0	0	0	0	0	
13. ROSEDALE	0	0	10	0	1	0	1	0	19
	0	0	52.6	0	5.3	0	5.3	0	17.9
	0	0	38.5	0	9.1	0	50.0	0	
	0	0	9.4	0	.9	0	.9	0	
14. TRENHOLME	0	0	1	0	0	0	0	0	1
	0	0	100.0	0	0	0	0	0	.9
	0	0	3.8	0	0	0	0	0	
	0	0	.9	0	0	0	0	0	
15. VINCENT	3	0	1	1	3	0	0	1	15
	20.0	0	6.7	6.7	20.0	0	0	6.7	14.2
	37.5	0	3.8	25.0	27.3	0	0	100.0	
	2.8	0	.9	.9	2.8	0	0	.9	
COLUMN TOTAL	8	7	26	4	11	1	2	1	106
	7.5	6.6	24.5	3.8	10.4	.9	1.9	.9	100.0

RAW CHI SQUARE = 263.00920 WITH 221 DEGREES OF FREEDOM. SIGNIFICANCE = .0255

NUMBER OF MISSING OBSERVATIONS = 308

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F NGHBHOOD BY DEVELOPS * * * * * * * * * * * * * * * * * *

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOPS
* PAGE 2 OF 4

NGHBHOOD / DEVELOPS	17.	18.	21.	22.	25.	27.	29.	ROW TOTAL
1. ALBION FALLS	0 0 0 0	0 0 0 0	0 0 0 0	1 100.0 33.3 3.1	0 0 0 0	0 0 0 0	0 0 0 0	1 3.1
4. GLENVIEW EAST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 100.0 50.0 3.1	1 3.1
6. KENTLEY	0 0 0 0	0 0 0 0	1 16.7 100.0 3.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	6 18.8
8. MCQUESTEN EAST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 33.3 50.0 3.1	3 9.4
9. MCQUESTEN WEST	0 0 0 0	0 0 0 0	0 0 0 0	2 28.6 66.7 6.3	0 0 0 0	1 14.3 100.0 3.1	0 0 0 0	7 21.9
10. PARKVIEW EAST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 3.1
11. PARKVIEW WEST	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 100.0 50.0 3.1	0 0 0 0	0 0 0 0	1 3.1
12. RED HILL	1 33.3 100.0 3.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	3 9.4
COLUMN TOTAL	1 3.1	1 3.1	1 3.1	3 9.4	2 6.3	1 3.1	2 6.3	32 100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *
NGHBHOOD BY DEVELOPS
* PAGE 3 OF 4

NGHBHOOD	DEVELOPS	1.	2.	3.	8.	9.	12.	13.	14.	15.	16.	ROW TOTAL
13. ROSEDALE	COUNT	0	0	0	1	1	0	0	1	0	0	5
	ROW PCT	0	0	0	20.0	20.0	0	0	20.0	0	0	15.6
	COL PCT	0	0	0	50.0	50.0	0	0	33.3	0	0	
	TOT PCT	0	0	0	3.1	3.1	0	0	3.1	0	0	
15. VINCENT	COUNT	1	0	0	0	1	0	2	0	0	0	4
	ROW PCT	25.0	0	0	0	25.0	0	50.0	0	0	0	12.5
	COL PCT	50.0	0	0	0	50.0	0	100.0	0	0	0	
	TOT PCT	3.1	0	0	0	3.1	0	6.3	0	0	0	
COLUMN TOTAL		2	1	4	2	2	1	2	3	1	3	32
		6.3	3.1	12.5	6.3	6.3	3.1	6.3	9.4	3.1	9.4	100.0

(CONTINUED)

FILE NONAME (CREATION DATE = 82/08/19.)

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NGHBHOOD BY DEVELOPS
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FILE NONAME (CREATION DATE = 82/08/19.)

* C R O S S T A B U L A T I O N O F *
NGHBHOOD BY DEVELOP6
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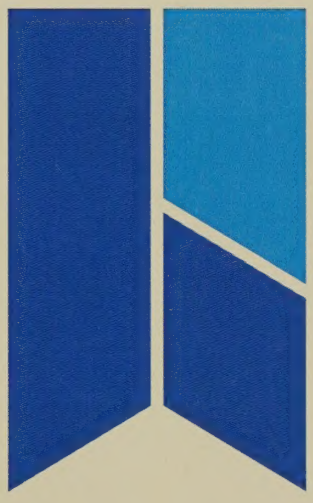
Placeholder for Foldout.

Insert to Be Photographed at a Later Date.



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APPENDIX G

Environmentally Sensitive Areas

Sensitive areas are categorized A, B, or c depending on how many of the selection criteria they meet.

A - Fulfils four or more criteria
B - Fulfils one to three criteria
C - Substantial data lacking

Criteria

1. The area represents a distinctive and unusual landform within the municipality, Ontario or Canada.

2. The area serves a vital ecological function such as maintaining the hydrologic balance over a widespread area, ie. it serves a water storage or recharge area.

3. The plant and/or animal communities of the area are identified as unusual or of high quality locally within the municipality, Ontario or Canada

4. The area is an unusual habitat with limited representation in the municipality, Ontario or Canada, or a small remnant of particular habitats which have virtually disappeared within the municipality.

5. The area has an unusually high diversity of biological communities and associated plants and animals due to a variety of geomorphological features, soils, water, sunlight and associated vegetation and microclimatic effects.

6. The area provides habitaf for rare or endangered species that are endangered Regionally, Provincially or Nationally.

7. The area is large and undisturbed, potentially affording a sheltered habitat for species which are intolerant to human disturbance.

8. The location of the area, combined with its natural features, make it particularly suitable for scientific research and conservation education purposes.

9. The combination of lanforms and habits is identified as having high aesthetic value in the context of the surrounding landscape and any alteration would siginificantly lower its amenity value.

APPENDIX G

Red Hill Marsh

Given an "A" status although it only fulfils two criteria, numbers 4 and 6 because the area is a last remnant of a once common habitat in the area.

Criterion 4 - Cattail marshes like this area developed in sheltered bays and inlets alont the Great Lakes shoreline. The beach strip sandbar protected the area of Hamilton Bay from lake waves allowing the marshes to develop.

Criterion 6 - Rare species of turtle live in this habitat.

Red Hill Creek - King's Forest

Given an "A" status for fulfilling six criteria: 1, 2, 3, 5, 6.

Criterion 2 - Performs an important ecological functions as a link between other similar systems. This is important in maintaining species diversity. This has been discerened through the study of islands. If the area in question are left isolated from similar areas, the number of species will decline.

Criterion 3 and 6 - A high quality ecosystem exists here as indicated by the varied biological communities and number of unusual creatures sensitive to development.

Criterion 5 - High deversity of biological communities due to the number of microclimates created by the variety of soils, slopes, incident, sunlight and moisture levels.

Criterion 9 - High aesthetic value in relation to the surrounding urban landscape. Nice views can be seen of the

creek and surrounding areas from within the Valley. From the outside, the green space provides a plesant view for passing motorists.

Rare Species

Red Hill Creek Marsh - Least Bittern - nesting in fresh-water marshes. Once common in region, now rare.

Pied Billed Grebe - found in summer freshwater ponds of bays with emergent vegetation.

Black Tern - nests on mats of marsh vegetation in shallow water. Only two nesting site in region.

Painted Turtle, Snapping Turtle, Musk Turtle, Eastern Spiny Softshell Turtle, Map Turtle, Blanding's Turtle, is also possibly found.

Red Bat - migratory tree, marsh possible stopover site during migration.

Common Galinule - found in freshwater marshes. Only two breeding stations in region.

Red Hill Creek - King's Forest

Prairie Deer Mouse - found at Mount Albion, only recorded regional site, once common.

Red Backed Salamander - only site in Wentworth where they have been collected in red phase.

Pickerel Frog - cool water frog, declining due to warm water and pollution.

APPENDIX G

Northern Water Snake - being locally eliminated.

Northern Ribbon Snake - found in Kettle bog terrain, restricted in Wentworth.

Smoky Shrew - inhabits wet, mossy, rocks in mature forest. Rare in Southern Ontario towards Lake Erie.

Short Eared Owl - Ten to 30 foot high nests in dense woodland.

Ground Cedar, Hairy Bush-Clover, Shinleaf, Night-Flowering Catchfly, Anise-Root, Common Stitchwort, Pointed-Leaved Tick Trefoil, Vetch, Spring Vetch, Pokeweed, Great Lobelia, Michigan Lily, Green Violet.

Environmentally Significant Features

1. North of Albion Falls: nesting for short eared owl.
2. Near Mount Albion Village: nesting for long eared owl.
3. Upper Gorge: Hardwood forest, unusual plants--green violets, small flowered cutleaf.
4. Escarpment at Mount Albion: Flowering Dogwood.
5. Red Hill Creek Valley at Greenhill Avenue: Good variety of birds and wildlife in the hardwood forest on the Valley side.
6. Floodplain between King St. and Queenston Rd.: Floodplain flora and old field vegetation creates good habitat for a variety of birds.
7. Near King St.: Unusual trees for the area--black walnut and sycamore.
8. Near Queenston Rd.--Unusual plants for the area--honewort and cow parsnip.

APPENDIX H

Vegetation Species found in the Red Hill Creek Valley

American Elm
Black Walnut
Canada Anemone
Chokecherry
Cottonwood
Cow Parsnip
Elderberry
False Solomon's Seal
Flowering Dogwood
Gill-Over-The-Ground
Honeysuckle
Hornwort
Nannyberry
Pure Oak
Small Flowered Cutleaf
Staghorn Sumac
Sugar Maple
Sycamore
Trembling Aspend
Water Pennywort
Wetland Cattail
White Ash
Willow
Wood Vetch

APPENDIX H

Animal Species Found In the Red Hill Creek Valley

American Toad
Chipmunck
Cottontail Rabbit
Fox
Frog
Grey Squirrel
Ground Frog
Groundhog
Hare
Mouse
Northern Brown Snake
Rabbit Raccoon
Red Squirrel
Skunk
Shrew
Western Chorus Frog
Woodchuck

APPENDIX H

Bird Species found in, Or Known to Breed in the Red Hill Valley

American Goldfinch
American Kestrel
American Redstart
American Robin
American Woodcock
Bank Swallow
Barn Swallow
Belted Kingfisher
Cuckoo
Black Capped Chicadee
Blue Jay
Bobolink
Brown Headed Cowbird
Brown Thrasher
Cardinal
Carolina Wren
Cedar Waxwing
Chipping Sparrow
Common Flicker
Common Grackle
Crow
Downy Woodpecker
Eastern Bluebird
Eastern Kingbird
Eastern Wood Pewee
Eastern Phoebe
Field Sparrow
Gold Winged Warbler
Gray Catbird
Gray Partridge
Great Crested Flycatcher
Great Horned Owl
Green Heron
Hairy Woodpecker
Horned Lark
House Sparrow
House Wren
Indigo Bunting
Killdeer
Long Eared Owl
Morning Dove
Northern Mockingbird
Northern Oriole
Ovenbird
Pheasant
Purple Martin
Red Eyed Vireo
Red Headed Woodpecker
Red Tailed Hawk
Red Winged Blackbird
Ring Neck Pheasant
Rose Breasted Grosbeak
Rough Winged Swallow
Rufous Sided Towhee
Savannah Sparrow
Scarlet Tanger
Screech Owl
Seagull
Song Sparrow
Sora
Spotted Sandpiper
Starling
Three Pair Cardinal
Warbling Vireo
Western Chow
White Breasted Nuthatch
Willow Flycatcher
Wood Thrush
Yellow Billed Cuckoo
Yellow Breasted Chat
Yellowthroat
Yellow Warbler

APPENDIX I

Advantages

By going door-to-door, personal contact with area residents was made. This system was chosen over the telephone technique as it was believed that better results would be achieved. "Door-to-door" allowed interviewers to get the "feel" of the neighbourhood as a whole and how residents related to their environment by walking through it. This definitely would help in planning for each individual neighbourhood. The findings could also be cross-referenced to that of Project R.E.D. (Research on Expressway Development) to see how attitudes have changed, and to reinforce the validity of their study.

Disadvantages

Several difficulties with the questionnaire came to light during the project. The problem areas are discussed below:

Firstly, the random sampling technique did not take into account that some respondents surveyed might have objected to answering a questionnaire whatever their views were on the recreation/expressway issue. Some form of pre-sample may have eliminated this problem.

Secondly, the questionnaire was designed with "yes" and "no" type answers. The first two types were often repeated and caused frustration and boredom for some respondents. The fill-in answers had been given space for

answers, but this was insufficient as many of those questioned felt the need to express themselves verbally at length.

Thirdly, the collection of data through interviews took up a large amount of time relative to the length of the project. Part of the problem was most homes had to be covered more than once. Information gathered was valuable, but some responses were not as valid as was hoped. Some respondents were not as co-operative as they might have been. This may be due to a lack of awareness on the issue of recreation in the Red Hill Creek Valley.

APPENDIX I

The results of the questionnaire were analyzed by computer using 2 specific techniques, namely; frequency tabulations and cross-tabulations.

Frequency tabulations were used to get an overview of general results for each wuestion in the questionnaire. This provided us with answers on the REd Hill Creek Valley as a whole. Also a check enabled us to determine any errors that had been made during input of data.

The second method was that of cross-tabulationsof data. This analysis was very important in that the results achieved gave us a neighborhood breakdown for each question asked. By doing cross-tabulations a better understanding of what each individual neighborhood lacked and needed with respect to the Valley was obtained.

Cross-tabulations were also used to compare our results to the results of Project R.E.D.. In this way the attitude changes of people in the studied areas could be determined and analyzed to see what implications people have on the recreation in the Red Hill Creek Valley.

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